

## Third World Debt: The New Crisis Came Early

By Carl Gewirtz

International Herald Tribune

PARIS — Two years earlier than expected, the Third World's debt crisis has intensified, leaving international banks and governments scrambling for solutions. At stake are public confidence in the world's banking system and political stability in Latin America, where the debt crisis is centered, as well as in Africa and parts of Asia.

Most experts were surprised at the speed with which the crisis moved into what some call Phase 2: Renewed cries of anguish have come from the developing countries about their inability to manage the burden of paying interest on their international loans. Fresh worries have emerged in financial markets about the ability of the international banking system, especially U.S. banks, to withstand any upset in the timely servicing of that debt.

Phase 2 had long been expected — but in 1982 or later, when the maturing of outstanding debt and the burden of the short-term rescheduled 1982-84 debt were expected to create a new crunch for the debtor states. Now, increasing dollar interest rates have pushed developments ahead by two years.

Government officials in the major industrialized states are clearly divided on whether adherence to the strategy pursued since the emergence of the crisis in August 1982 remains adequate or whether it needs to be modified.

What the commercial banks can and should do to ease the burden of servicing the debt remains a crucial issue. At latest count, private creditors are owed an estimated \$412 billion.

Bank relief is a delicate subject. It raises questions in the public mind about the profitability of commercial banks if they are forced to relieve or forgive some of the debt or

According to the official scenarios, Phase 2 was to have been less traumatic for public confidence than the near panic in mid-1982, when Mexico's temporary moratorium on servicing its debt triggered the initial crisis.

Sustained recovery from recession in the industrialized world, declining dollar interest rates and smaller relative exposure of the banks were fundamental in the success of the strategy.

But dollar interest rates, on which most of the developing countries' commercial bank loans are based, are rising rather than declining.

Every increase of one percentage point adds an estimated \$4 billion in Third World interest payments. Since the beginning of this year, rates have risen almost three percentage points.

This estimate by the International Monetary Fund overstates the situation, experts at the Organization for Economic Cooperation and Development contend. They point out that these countries also have about \$230 billion on deposit with banks and that the rising interest income of these holdings means that the net additional burden in

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interest payments. It also calls into question whether under such circumstances banks would be willing to continue making new loans.

Continued bank lending is considered essential to finance economic growth in the developing countries. Without such growth, the remedial measures that most countries have agreed to undertake to improve their economic performance stand little chance of being applied without causing political turmoil.

## U.S. Forces To Cut Off Recruitment

By Richard Halloran

New York Times Service

WASHINGTON — Two weeks from now, the U.S. armed forces will stop taking recruits for the rest of the fiscal year because their enlistment quotas will be full, according to Defense Department officials.

They said young men and women who wanted to enlist could still sign up but would not be able to report for training and duty until after Oct. 1, when fiscal year 1985 begins.

In addition to the large numbers of people seeking to enlist, the officials said, recruits now include the highest proportion of high school graduates since the end of World War II.

In the first half of this fiscal year, ending March 31, the officials said 93 percent of all recruits were high school graduates, as against 89 percent for the same period last year, and 68 percent in 1980.

Military leaders say that high school graduates are easier to teach and cause fewer disciplinary problems.

The assistant secretary of defense in charge of personnel, Lawrence J. Koro, said in an interview that the armed forces were enlisting more and better qualified young men and women because the services offered job opportunities and wages that compete with the civilian labor market.

"If you offer fair and competi-

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## Some Congressional Party Delegates Feel Mondale Must Broaden Appeal

By Steven V. Roberts

New York Times Service

WASHINGTON — Representative J.J. Pickle of Texas is an uncommitted delegate to the Democratic National Convention, and last week he received a phone call from his old friend, Walter F. Mondale. The former vice president wanted to know whether he could count on Mr. Pickle to support him for the presidential nomination.

The answer was a polite but firm no. "I told him that I was uncommitted and that I would stay that way," Mr. Pickle said in an interview.

Members of Congress will account for at least 191 votes at the Democratic convention, or about 10 percent of the total needed for nomination. There is considerable uneasiness among some of these political professionals over the prospect of running in November with Mr. Mondale at the head of the Democratic ticket facing President Ronald Reagan.

"Mondale carries so much baggage," complained one Southerner who did not want to be identified. "There's a feeling that he's so locked in with special-interest groups that he'll have a very difficult time spreading his base."

Some lawmakers believe that if Mr. Mondale loses badly in the final round of primaries on June 5, there would still be a small chance of denying him the nomination.

"This thing really isn't over with yet," insisted Representative Buddy MacKay of Florida, who favors

Senator Gary Hart of Colorado as the party's nominee.

But most congressmen describe themselves as political realists, and they seem ready to concede the nomination to Mr. Mondale. So a number of moderates and conservatives, such as Mr. Pickle, are starting to consider ways of organizing themselves into a coherent bloc and pressuring Mr. Mondale into moving toward the political center.

Some, such as Representative Charles W. Stenholm of Texas, are concerned about toning down the liberal positions in the party platform. "Where we're losing the battle is in appealing to middle Ameri-

ca," said Mr. Stenholm, a leader in the group of conservative Southern Democrats who became known as "boll weevils" for supporting much of Mr. Reagan's tax policies.

But the more visible and concrete goal of this group is to persuade Mr. Mondale to pick a moderate as his running mate, preferably from a Southern or border state. The most frequently mentioned possibility is Senator Lloyd M. Bentsen of Texas, but some consider him a lackluster campaigner and would prefer Representative James C. Wright Jr. of Texas, the majority leader and an orator of considerable reputation.

"We have to have a ticket that's electable," added Representative James R. Jones of Oklahoma, a

former supporter of Senator John Glenn of Ohio who is now uncommitted. "We have to appeal in a broad range of voters."

Mr. Mondale continues to command strong support among members of Congress. According to Richard Moe, a Mondale aide, 99 of the 164 House members who have been named as delegates support the former vice president. Of the 25 Democratic senators who are delegates, 10 openly back Mr. Mondale, he said.

Lawmakers from industrial states with economic problems tend to focus on Mr. Mondale's domestic record and long support of labor. As Representative Nick Rahall 2d of West Virginia put it, "I feel he's a true friend of working men and women."

Representative William R. Hatchford of Connecticut cites the candidate's "depth of experience" in foreign affairs. Representative Barbara B. Kennelly, another Connecticut Democrat, adds: "Mondale's a mature, tested individual. I feel very comfortable with him."

Moreover, as Mr. Moe noted, "members of Congress don't change their commitments lightly," and it would take an upheaval to shake them from the Mondale camp.

Mr. Mondale also profits from a lingering suspicion that Mr. Hart is an unreliable politician who could "self-destruct" during the campaign and pull many Democratic candidates down with him.

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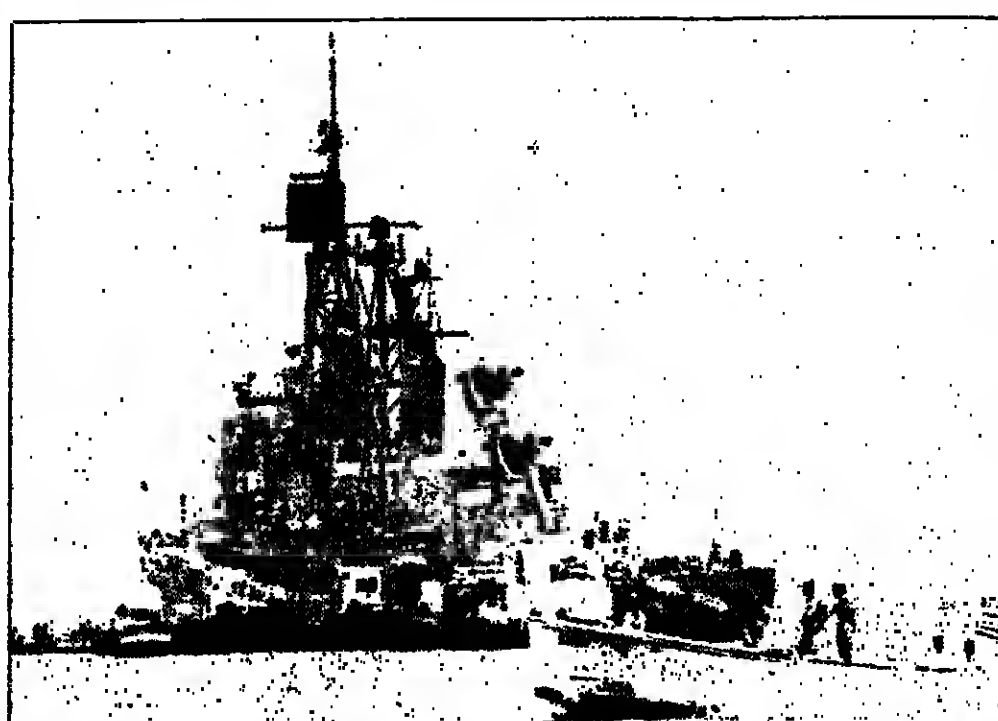
State Department officials said Sunday that the missiles would be delivered to Saudi Arabia within 72 hours and that an announcement probably would be made Tuesday.

Under law, such military sales usually require a period of 30 days for Congress to consider the matter.

The weapons are intended for use against possible Iranian air attacks on tankers, oil fields and other installations.

On Friday, State Department officials told members of Congress that President Ronald Reagan had given tentative approval to the emergency sale to Saudi Arabia of 200 Stinger missiles and 100 shoulder-held launchers. But during the weekend, the Saudis said that they needed more missiles than they had been approved.

This led the administration to decide Sunday to send 400 missiles and 200 launchers, valued at more than \$30 million.



AMERICAN VESSEL IN GULF — The U.S. guided missile carrier Luce was moored off Bahrain harbor on Sunday as armed sailors on a picket boat warned off passing vessels.

## U.S. Doubles Number of Missiles Being Sent Immediately to Saudis

By Bernard Gwertzman

New York Times Service

WASHINGTON — The Reagan administration has decided to double the number of Stinger anti-aircraft missiles being sent to Saudi Arabia, according to administration officials.

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power boats that would sail close to oil tankers.

About 20 to 30 U.S. Army specialists will be sent to Saudi Arabia to train the Saudis in using the Stingers, which have a range of three miles (4.8 kilometers), the officials said. An official said it takes about a week to 10 days to train someone to use the Stinger.

The flareup in the Gulf has been caused by Iraqis hitting targets near the Iranian oil terminal at Kharg Island and Iran retaliating by hitting ships near Kuwait and Saudi Arabia. Administration officials said the only additional military help being provided the Saudis was the dispatch of two U.S. Air Force KC-135 aerial tankers to augment three identical U.S. Air Force planes already in Saudi Arabia.

The Saudis, who have been unable to alert their U.S.-made F-15s

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investigation will be conducted by the police and the State Attorney's office, the Defense Ministry's statement said, and disciplinary measures are to be taken against other security personnel.

The statement said that Defense Minister Moshe Arens "regards with utmost gravity — and condemns most forcefully — the behavior which led to the deaths of the two terrorists who had been captured on the bus, behavior which is in clear contradiction to the basic rules and norms incumbent on all, and especially on the security forces."

"Not even the special circumstances of this case justify such behavior," he said.

The commission's findings, which are likely to become an issue in Israel's general election in July, followed the arrests last week of two Israeli Jews charged with conducting or aiding acts of terrorism against Arabs in the occupied West Bank.

The hijacking, which began the evening of April 12, involved four Palestinian Arabs who forced the driver of a bus running from Tel Aviv to the Mediterranean town of Ashkelon to continue to the occupied Gaza Strip. They threatened to blow up the bus and its 35 passengers unless 500 Palestinian prisoners were released from Israeli prisons.

Israeli troops stormed the bus early April 13, killing an Israeli woman and wounding seven of the passengers. The army's public statements, that two of the Palestinians "died on the way to the hospital," implied that all four were killed as a result of the assault.

But according to the Defense Ministry, the commission found that while two died "as a result of the attacking force's gunfire," two others, cousins named Majdi and Subhi Abu-Jumaa, were captured.

"During the operation to retake the bus," the ministry's summary reported, "the two captured terrorists were dealt severe blows to the head and body, delivered by weapons in order to stun and prevent any possibility of their detonating the bomb that was aboard the bus at the time. The commission has determined that these blows were an operational necessity, designed to prevent a possible threat to human life."

The summary said they were taken off the bus for interrogation about possible "booby traps" on the bus and/or additional terrorists who might present an immediate danger. Then, it said, "the two terrorists were dealt severe blows by men on the scene."

The bodies were exhumed for autopsies, which found that "one of the terrorists died of a skull fracture as a result of a blow dealt to the back of the head by a blunt instrument, during the time between his removal from the bus, at the earliest, and his evacuation from the site, at the latest," the statement said.

The other died similarly "between the retaking of the bus by the strike force and his evacuation from the site."

The commission found that there had been no discussion of what to do with captured terrorists, either in briefings before the assault or afterward.

The statement did not identify the "security forces" involved. They are believed to be either army personnel or the Shin Bet, the secret police.

The text of the commission's report (Continued on Page 2, Col. 3)



## Thousands Protest in Bonn to Back Strike by Metalworkers

Tens of thousands of trade unionists gathered in Bonn Monday in support of demands by striking metalworkers and printers for a 35-hour workweek and unemployment compensation. Unionists estimated 230,000 people attended, while police put the figure at 60,000.

## Poland: A Long Experience Keeps Underground Flourishing

By John Kifner

New York Times Service

WARSAW — Poland has long been an underground nation. "In our country this is a big tradition," said a university student who came out of hiding under a government amnesty but remains active in what is left of the outlawed Solidarity union. "My grandfather was in the same situation."

Although the free-wheeling organizations that flourished in Solidarity's brief heyday have been crushed and their remnants constantly disrupted by police, the underground still manages to function. Last week, dissidents in Warsaw showed off their capability by arranging a clandestine interview with a Soviet Army deserter who said he had been hidden in more than 20 homes since December 1981.

At least as far back as the partition by Russia, Austria and Prussia that erased Poland from the map from 1795 until after World War I, Poles have organized underground

political and cultural networks, largely nurtured by the Roman Catholic Church in its role as guardian of Polish nationalism. After an unsuccessful uprising in 1893, patriots established the clandestine "Flying University," a forerunner of the classes conducted by dissident intellectuals who formed the Workers' Self-Defense Committee (KOR) in 1976. Under Nazi occupation in World War II, Poland had perhaps its most complete resistance organization, embracing everything from schools to secret local governments.

The underground operates on several levels. There is a cadre of activists, the nucleus of which is the five-man steering committee known as the TKK. Beyond that are several hundred thousand people involved in work such as printing and distributing a vast outpouring of newsletters, pamphlets, journals and books that are the most distinctive feature of intellectual life. The network manages to function in major industrial centers such as Wroclaw, Gdansk and

Nowa Huta; last month there was word of a new organization in the Silesian coalfield in the southwest.

"We would estimate in Warsaw there are about 5,000 people who are really underground," said a young woman in designer jeans whose business is moving fugitives from house to house. "I don't mean those who just go to the special Masses," she added, "but people who are in hiding or actually running the presses."

Hundreds of underground broadsheets and newspapers pass from hand to hand, along with a growing body of serious literature. Underground printing has become the main target of the authorities.

Last month, dissidents said, police broke up a ring operating in, of all places, the main official publishing house, Dorn Slowa Polskiego, where the Communist Party and government newspapers are printed.

Perhaps equally important is the widespread support of underground operations by what might

be called "the middle" — above-ground sympathizers. Indeed, the university activist said he had accepted amnesty because his underground printing operation was functioning smoothly and it became more effective to work in the open.

"We have organized the technical base," he said. "Most of this underground press is being printed by normal people." In high schools and universities, he added, student governing organizations are dominated by Solidarity supporters, under rules that are "a wall that can protect us."

The authorities got a taste of it recently when Janusz Onyszkiewicz, a mathematician who had been Solidarity's chief spokesman, was among those elected to the Academic Senate of Warsaw University.

The government has proven repeatedly that it can mass an awesome display of riot policemen backed by water cannon to quell any attempt at street demonstra-

tions. Yet, Poles persist in what are by now largely symbolic gestures, including the memorable appearance of Solidarity founder Lech Walesa and cheering supporters who infiltrated an official march on the May 1 Communist holiday.

In recent months, the counter-culture, largely protected by the church, has taken root throughout Poland in such activities as lectures, study groups, tape cassettes of anti-government songs and ideas and art shows and political theater in private apartments. "We haven't tanks, but we have time," the university student said. "Time works for us."

Since the Solidarity era, Zbigniew Bujak, an underground leader, said in an interview last year, "the system has been unable to regain its original effectiveness in spite of the repressive legislation embracing practically all areas of social life."

The authorities, he added, no longer have the power to force social behavior based on "resignation from the struggle."

ter stage. Deposed by the military, radicals and ignored even by her own populist Peronist movement, Mrs. Peron has re-emerged as a protagonist at a crucial moment for the new democracy.

Her arrival in Argentina on May 20 was a testimony to a shift in strategy by President Raul Alfonsin. Beset by runaway inflation and foreign debt and by an increasingly hostile opposition, Mr. Alfonsin called in Mrs. Peron after halting his reformist program to seek a new national political alliance.

The 53-year-old widow of two-time president Juan D. Peron has fallen into the role of chief opposition broker, much as she inherited the presidency upon her husband's death a decade ago. Secluded in Spain since 1981, Mrs. Peron took no role in last year's election campaign and has appeared unwilling to move back to Argentina. Yet, with the Peronist party badly divided, she was the only mediator available to both its factions and the newly conciliatory Radical government.

"At least," said a presidential adviser, "she has the name of Peron." And so, with a phalanx of advisers, an acquired Castilian accent and an apparently new preoccupation with conservative Catholic teachings, Mrs. Peron spent last week meeting Mr. Alfonsin and attempting to impose order on her party.

To some critics, this "dialogue of national unity" was little more than a nostalgic dose of the political theater that has always seemed to accompany Mrs. Peron. The former president, whose administration, from 1974 to 1976, was dominated by a confident astrologer named Jose Lopez Rega, has shocked her party's nominal leadership by delegating key responsibilities to obscure loyalists.

"Peronism has become the memory of the widow of its boss," said a dissident party congressman, Julio Barbaro. "We are losing public support every day."

Yet, government officials and Peronist loyalists say that Argentina may be on the verge of a political accord that could unite the country behind the government as it faces negotiations on the foreign debt.

"This is a transition to a kind of government of coalition," said Dante Giadone, the undersecretary of the presidency.

In particular, Radical strategists say the dialogue is meant to win support for Argentina's increasingly hard-line position on payment terms for its foreign debt and to avoid turmoil at home on the outcome of negotiations with the International Monetary Fund and creditor banks.

So far, no agreements have been reached. But the cost of such a consensus has been the temporary abandonment of key parts of the Radical campaign platform. Slowed in his drive to reform the Argentine military, Mr. Alfonsin has now also curtailed an effort to force reform and supervised democratic elections, on Peronist-dominated unions.

Instead, Mr. Alfonsin replaced his hard-line labor minister last month with a moderate who has taken a conciliatory approach to the powerful union bureaucracy.

"We thought we had to carry out a series of fundamental reforms," said one high official. "Now we are willing to leave some of these things aside for the sake of preserving the union."

To some disillusioned government supporters, who dreamed that Mr. Alfonsin could break the hold of Peronist unions and rightist generals on Argentine politics, the

talks with Mrs. Peron have been a disastrous mistake.

"Argentina has lost its way again," wrote James Neilsen, editor of the Buenos Aires Herald. "The great dream that flared up while the military was withdrawing ... is dying."

Government officials respond, however, that the severity of the debt-payments crisis, Peronist control of the Senate and the unexpected resilience of the union leadership made compromise essential. Moreover, they add, the inter-

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## A Palestinian Uses Art to Express Resistance to Israel

By Edward Walsh  
Washington Post Service

**JABALIA CAMP, Occupied-Gaza Strip** — In April 1982, Suhail Ghabin, a 7-year-old Palestinian, was shot and killed by Israeli soldiers during a violent demonstration in this squalid refugee camp.

The youth was one of scores of people killed that spring in the disturbances that swept the Israeli-occupied West Bank and Gaza Strip. But he lived on in the memory of his family, including his uncle, Fathi Ghabin, a locally prominent Palestinian painter.

Later, Mr. Ghabin painted a picture of his nephew showing him lying on his side, blood gushing from a wound in his chest. In the background a crowd of demonstrators was shown with uplifted arms, a sign of defiance.

The most prominent colors in the picture — the youth's green and white sweater, his black trousers, the red blood — are those of the Palestinian flag.

Because of that picture, and others he exhibited in the Gaza Strip in August, Mr. Ghabin is now serving a six-month prison sentence. He was convicted by an Israeli military court this month for possessing and displaying "inciting material."

"First it is the colors, you have the colors of the PLO flag," an Israeli military official said in explaining Mr. Ghabin's conviction. "That is considered inciting material because it incites the ongoing armed struggle."

Other symbolism used by Mr. Ghabin, he said, included a "broken star of David," a picture of an old man with a bleeding boy and a smoking cigarette, representing the Israeli occupation, in the background and "the use of an eagle with a black nose as a representative of the Jews."

The theme of Mr. Ghabin's exhibition, the official said,

was the Israeli occupation, the oppression of Palestinians and "the struggle for revenge."

Mr. Ghabin's case illustrates an often invisible aspect of the Israeli-Palestinian conflict in the West Bank and Gaza Strip. It is essentially the conflict between authorities intent on maintaining order and those who use the symbols and other expressions of Palestinian nationalism that the authorities consider subversive.

The conflict goes on in numerous, nonviolent ways. It includes the Israeli military censorship of Arabic newspapers published in East Jerusalem. Once, one of the newspapers managed to slip past the censor a crossword puzzle in which the blacked-out squares formed the letters PLO, for the Palestine Liberation Organization.

This spring, in a once-abandoned and fire-gutted movie theater in East Jerusalem, a Palestinian theater company has performed a play that is banned in the West Bank and Gaza Strip. Under Israeli law, Arab East Jerusalem has been annexed and is not subject to occupation laws, as Jackie Lubek, 31, a U.S.-born Jew and the only non-Palestinian member of the El Hakawati Theater Company points out.

The company, financially backed by wealthy overseas Palestinians, has existed since 1977 and performs often in Israel, the West Bank and Gaza. But two of the four productions it has created are not licensed for performance in the occupied territories.

One of them, whose English title is "1,001 Nights of a Stone Thrower," includes a character named "Gidi," or the man and rooster, who is described as a "military governor" and who early in the play is depicted as "enjoying the company of the weapons salesman and their wares," according to a synopsis.

"They can't have everybody under lock and key," said

Miss Lubek shortly before the first performance of "1,001 Nights of a Stone Thrower" at the center. "We are going by the books. We get no PLO money, no black money."

According to Miss Lubek, the theater company plans to test further the limits of its license to perform the play in Israel by busying people to the East Jerusalem theater from the West Bank.

She argues that no serious attempt at Palestinian theater could omit references to the Israeli occupation. "We are creating material about us," she said, adding, "It's not all politics. In the play we have a kid who throws a stone. Well, Palestinian kids play with stones the way American kids play with a ball. Is that political?"

According to Arab critics of the Israeli regulations governing such questions, the enforcement is subjective and selective. In the Gaza Strip, friends of Mr. Ghabin say he was arrested and his paintings confiscated less for their content than because he was a local hero and Palestinian activist. "Everyone in Jabalia camp knows him and is proud of him as a nationalistic painter," said a Gaza resident. "He has lived in the camp all his life."

Married and the father of seven children, Mr. Ghabin, 37, has been in trouble with the Israeli authorities before. In 1970, he served a prison sentence stemming from a demonstration in Gaza. Israeli Army officials say Mr. Ghabin was charged with planting a bomb, but his relatives say he only participated in the demonstration.

Mr. Ghabin served another brief sentence in the mid-1970s for distributing banned written material in the Gaza Strip.

At his art exhibition, held at the Islamic University in Gaza, eight paintings were confiscated. Mr. Ghabin was held in jail for 17 days before a formal court date was set.

## Islamic Unit Will Discuss Gulf Initiative

### Peace Patrols Proposed Along Iran-Iraq Border

Compiled by Our Staff From Dispatches

**ABU DHABI** — Gulf states of the Organization of the Islamic Conference announced Monday that leaders would meet in Saudi Arabia June 9-10 to discuss a peace plan to end the Gulf war.

The group's secretariat said in Jeddah, Saudi Arabia, that a nine-member Islamic Mediation Committee was to meet to discuss a Palestine Liberation Organization peace initiative.

In Kuala Lumpur, Foreign Minister Ghazali Shafie of Malaysia said the committee was to propose deployment of Islamic peacekeeping troops along the Iraq-Iran border as part of the initiative.

"Iran and Iraq are members of the OIC, and this time the mediation bid stands a handsome chance of gaining success," said an Arab diplomat. "Iran never turned down OIC mediation. The Tehran leadership merely said that OIC peace proposals were insufficient."

He said the peace committee has been working on a political and economic plan to end the war, including stationing of troops between the two belligerents. The committee comprises the heads of state of Turkey, Gambia, Bangladesh, Pakistan, Malaysia, Senegal, Guinea, the chairman of the PLO, Yasser Arafat, and the secretary-general of the Organization of the Islamic Conference, Habibullah Khan.

In Tehran, President Ali Khamenei would not accept bullying by any states and would not allow Iraq to block its oil exports.

The peace force idea was first proposed by Mr. Arafat, who arrived Monday in Kuwait as part of a diplomatic shuttle he has embarked on in an attempt to form an Arab consensus to end the fighting.

The Islamic proposal came as military intelligence reports indicated that about 500,000 Iranian troops were ready to begin an offensive on Iraqi positions.

In Baghdad, an Iraqi military commander warned Monday of an Iranian offensive against southern Iraq, but said his country's forces were ready to repulse it. "The Iranian enemy has completed its preparations for a new offensive on the southern sector," the unnamed brigadier said on television.

He added that Iraqi forces were ready "to meet the enemy and inflict heavy losses on them."

Diplomats both in Baghdad and Tehran have been saying for several months that Iran had massed hundreds of thousands of men near the front lines for a new attack after a major offensive earlier this year that Iraq says ended in failure.

But the focus of the Gulf war switched from the ground this month, when Iraq stepped up its attacks on ships using Iranian ports and Iran apparently retaliated against Arab vessels on the western side of the Gulf. At least 21 ships have been reportedly attacked in the Gulf since March 27 by both Iraqi and Iranian planes.

At least 60 oil tankers, many carrying Gulf oil, are at anchor off a canal linking the Red Sea and the Persian Gulf. The canal is a major lifeline for the world's oil supply, and Iraq has threatened to enter the Gulf war zone without military protection.

(UPI, AP, Reuters)

## WORLD BRIEFS

### Mubarak Party Leads in Early Returns

**CAIRO (Reuters)** — President Hosni Mubarak's ruling National Democratic Party appeared Monday to be headed for a big general election victory, but the rightist New Wafd Party may form the strongest parliamentary opposition that Egypt has had in many years.

Early returns of votes cast Sunday in an election marked by violence and a low turnout among the 13 million registered voters showed the National Democratic Party well ahead of four opposition parties. The opposition has claimed that there was widespread fraud and intimidation during the voting.

Allocation of the 458 seats in the People's Assembly will be made final Tuesday, after computers finish working out the result of a complex new proportional representation electoral system. The main challenge to the National Democratic Party was from the Wafd, a revival of a nationalist party formed in 1919 and now allied with the Islamic Islamic Brotherhood. Interior Ministry sources said the Wafd seemed to be getting one vote to every three for the ruling party. Analysts said this might fulfill predictions that the opposition would muster around 100 seats in the new chamber.

### Paris, Bonn Announce Copter Pact

**PARIS (WP)** — France and West Germany on Monday announced plans for a contract to build more than 400 combat helicopters in a politically significant move that is likely to reinforce defense cooperation between the two countries.

The contract, worth \$2.5 billion, will be signed Tuesday during a meeting between President François Mitterrand of France and Chancellor Helmut Kohl of West Germany. The helicopters are designed for both anti-tank and military support operations. The West German Army will receive 212 helicopters while the French will receive 215.

In an interview with the Paris newspaper Le Figaro, Chancellor Kohl said he attached great importance to the helicopter deal, which he said would strengthen the role played by the two nations within the NATO alliance. Some of the French helicopters will be used to ensure the protection of France's "rapid action force" made up of 47,000 men who can be swiftly deployed in forward positions in West Germany in the event of war.

### NATO Ministers Meet in U.S. Today

**WASHINGTON (AP)** — The 16 foreign ministers of the North Atlantic Treaty Organization will begin meeting here Tuesday with the likely to include the Gulf war, Dutch reluctance to accept new NATO nuclear missiles and Soviet relations with the West.

The main meeting will be held at the State Department and at the Wye Plantation, a secluded retreat across the Chesapeake Bay from Washington. The Dutch missile question is expected to come up at that meeting and at another session between the U.S. Secretary of State, George P. Shultz, and the Dutch foreign minister, Hans van den Broek.

Mr. van den Broek left The Hague on Monday without a cabinet decision on whether to deploy the cruise missiles in the Netherlands, a Foreign Ministry source said. Despite intensive cabinet negotiations, the governing center-right coalition has been unable to reach a compromise on the deployment of 48 missiles scheduled for 1986.

### Papandreou Says EC Summit Will Fail

**ATHENS (Reuters)** — Prime Minister Andreas Papandreou says the European Community summit meeting next month will fail. Europe's economy will worsen and American interest rates will keep rising.

In a weekend conversation with Greek reporters widely quoted in Monday newspapers, Mr. Papandreou, a Socialist and a former professor of economics in the United States, reiterated that European countries should enact controls to stop the flow of capital to the United States.

Referring to the Community's last three summits and to the forthcoming meeting June 25-27 in Fontainebleau, France, Mr. Papandreou said, "There was failure in Stuttgart, failure in Athens, and failure in Brussels. There will be failure in Fontainebleau."

Andreas Papandreou

### U.S. Begins War Games in Honduras

**TEGUCIGALPA, Honduras (UPI)** — U.S. Salvadoran and Honduran troops began war games in Honduras Monday that Salvadoran rebels charged were part of a plan to support a Salvadoran Army drive to trap insurgent forces in the tense border region.

Colonel Neil Buttermere, military spokesman for the U.S. Embassy in Honduras, said 1,000 U.S. soldiers and about 3,000 Honduran and Salvadoran troops were taking part in the maneuvers near the Salvadoran border. He said the exercises will peak with a "combined air assault" June 7 over the Jamastran military installation, about 20 miles (32 kilometers) from the Nicaraguan border.

The clandestine Salvadoran guerrilla station, Radio Venceremos, said the maneuvers were part of a plan to pressure their forces from the rear while Salvadoran Army troops conducted an offensive against rebel forces in Morazan province, which borders Honduras.

### Reagan Honors Unknown Soldier

**WASHINGTON (UPI)** — President Ronald Reagan bestowed the Medal of Honor, the highest U.S. military honor, on the only unknown soldier of the Vietnam war at his funeral Monday and thanked him and all Vietnam veterans for fighting "for human dignity, for free men everywhere."

Mr. Reagan also called on Hanot to "return our sons to America" and to make a full accounting of the 2,489 servicemen still listed as missing in action in the war.

The unknown soldier, the only one among the more than 58,000 Americans who died in Vietnam that the military could not identify, was buried with full military honors at the Tomb of the Unknown Soldier in Arlington National Cemetery. The tomb, where the remains of unknown soldiers from World War I, World War II and the Korean War are buried, is engraved, "Here Rests in Honored Glory an American Soldier Known But to God."

### For the Record

Japan's most powerful labor organization, SOYHO, announced in Tokyo Monday that it would step up protests with "millions of people" against U.S. plans to deploy Tomahawk cruise missiles in the Pacific next month. (UPI)

Peter Uhl, a prominent member of the Charter 77 human rights movement in Czechoslovakia, was released from prison Monday in Prague after serving a five-year term on charges of subversion, émigré sources said in Vienna. (Reuters)

A Milan court on Monday sentenced 44 persons, including several high-ranking neo-fascist officials, to prison terms of up to 10 years for involvement in an oil scandal. The charges ranged from smuggling of oil products to tax evasion and criminal association. (AP)

At least 16 persons were killed in a raid by suspected Ugandan Army regulars on a Roman Catholic shrine on the outskirts of Kampala last week, a Catholic newspaper, the Daily Monitor, said Monday. The report said the incident at Nungungu took place Tuesday. (UPI)

Tales, Oklahoma, residents cleaned mud and water from their homes Monday, trying to recover from the city's worst flood, which killed 10, injured 83 and destroyed the homes of up to 3,000 families, the Red Cross said. (UPI)

A military court in Istanbul Monday sentenced seven persons to death at the trial of 199 members of a clandestine leftist organization, Tiki, the Turkish radio said. Most of the other defendants got jail terms and 38 were acquitted. All were charged with the killing of 20 persons. (Reuters)

Twenty persons were killed and 53 injured in a fire at the Time Hotel in central Taipei Monday, police reported. The 14-story, 240-room hotel opened 18 months ago. (AP)

Tens of thousands of Uruguayan demonstrators, demanding free elections, political amnesty, full employment and press freedom, took to the streets of Montevideo Sunday to challenge the nation's military rulers.

## Americans in Beirut Warned of Kidnappings

Compiled by Our Staff From Dispatches

**BEIRUT** — Police and soldiers bolstered security around American University in Beirut after a warning from U.S. intelligence that pro-Iranian militants were planning mass kidnappings of Americans on and around the campus.

Meanwhile, U.S. officials confirmed Monday that part of the U.S. Embassy would be moved from Moslem West Beirut to the Christian eastern sector amid new threats of "terrorist actions" against Americans.

A U.S. Embassy spokesman, Jon Stewart, acknowledged the move was partly for security reasons, but he said lack of adequate space in West Beirut was also an important factor.

He confirmed that the embassy was taking seriously the threats against the hundreds of Americans who live mainly in the western sector.

"Through normal intelligence channels, we learned somebody had the intention of taking terrorist actions against the American University of Beirut, the embassy and Americans in general," he said.

Other U.S. sources said they received reports that 100 pro-Iranian militants with explosives wrapped around their bodies planned to seize U.S. academics at the university and diplomats at the adjacent U.S. Embassy compound.

Three American professors at the university have been killed or kidnapped since 1982 and U.S. diplomatic and military installations have also been hit by devastating attacks by Moslem militants.

A university statement said "severe security measures" were taken after the warning of a possible mass kidnapping attempt.

Classes were suspended Monday at the university while troops searched buildings after a telephone caller said a bomb had been placed.

The hoax appeared unconnected with the kidnapping warning.

Students said the university received frequent bomb threats.

Elsewhere, police closed the only crossing between East and West Beirut for two hours on Monday after rival Christian and Moslem militiamen manning checkpoints on either side kidnapped 50 people at gunpoint, state and private radio stations said.

A committee of representatives from the Lebanese Army and the warring Christian, Shiite Moslem and Druze factions arranged the release of the 50 two hours later, the stations said.

The crossing was ordered reopened under the supervision of Lebanese police and French observers.

Earlier, Kamel Assad, the parliamentary speaker, said he had set 11 A.M. Thursday for parliament to begin discussions on the new government's policy statement, in preparation for a vote of confidence in Lebanon's government of national security.

The session has been delayed for more than a week by concern for the safety of the legislators.

A government official said the 99-seat parliament's decision on whether to give the government such a vote would not be taken Thursday.

He said discussions on the policy statement "could take a few days, and maybe even more than a week."

The government must win a vote of confidence at parliament before it is formally installed.

Prime Minister Rashid Karame said after a meeting with President Amin Gemayel at the presidential palace in Baabda that his 10-member cabinet would hold its weekly session on Wednesday before appearing before parliament.

Without a vote of confidence, Mr. Karame's government has been unable to start serious work on policies approved by the ministers nine days ago.

(AP, Reuters, UPI)



In the company of a bodyguard, Thomas M. Sutherland, acting dean of the agriculture department at American University of Beirut, read his morning newspaper Monday.

## Israel Says Security Forces Killed 2 Captured Hijackers

(Continued from Page 1)

port was not released. It was summarized by the Defense Ministry statement and was apparently timed to precede Mr. Arens's visit this week to the United States, where he could have expected to face questions on the matter.

Initially, Israeli authorities tried to suppress news of the incident by having the military censor ban the publication of photographs taken by news organizations of the two hijackers being led away from the bus. News stories on the subject were also barred by censorship.

But after the details were published abroad despite the censor's restrictions, Mr. Arens appointed

the inquiry commission, headed by a reserve army general, Meir Zorea.

■ **Terrorist Suspects' Trial Set** — Israeli television announced Monday that the trial of 27 suspected members of the Jewish terrorist anti-Arab underground would begin June 17, United Press International reported from Jerusalem.

Charges against the suspects, who include settlers from the Golan Heights and the West Bank and two high-ranking army officers, include the maiming of two Arab mayors in 1980, the killing of four Arab students at Hebrew's Islamic College in July, and the planting of bombs on five Arab buses in Jerusalem last month.

## Stinger Shipment Increased

(Continued from Page 1)

quickly enough to intercept Iranian fighters that have twice attacked ships close to Saudi waters in the past two weeks, have requested that the U.S. Air Force refuel the F-15s in flight; this would allow the F-15s to be on patrol longer and perhaps intercept the Iranian Air Force's U.S.-made F-4s before they reach their targets.

With the possibility of Iranian and Saudi Arabian planes clashing, there is the risk that the U.S. aerial tankers might be caught in the fighting. But a State Department official said that "the view here is that it is virtually out of the question."

He said that the AWACS reconnaissance planes were able to detect the Iranian planes early enough for the aerial tankers "to run for it." He said "as long as the tankers remain as flying gas stations, there is little likelihood of their becoming involved in fighting."

Thus, he said, there was no reason to consult with Congress about the War Powers Act that requires congressional approval of U.S. forces in a zone of imminent hostilities.

Despite the increase in U.S. help for the Saudis, State Department officials insisted that the Saudis were not eager to become involved in a direct military conflict with Iran. "They don't want to get into trouble with Iran," an official said.

He said that the Saudis were so unhappy with the State Department for disclosing last week that Saudi planes had gone aloft looking for the Iranians that they issued an official statement denying it, even though the takeoff was witnessed by many people.

"They don't want to fight with Iran and they are giving unequivocal backing to efforts at the United Nations to settle the conflict between Iran and Iraq," a State Department official said. "But at the same time, they want to put themselves in the best defensive situation they can. They are looking to avoid a war if they can."

Last week, administration officials said that some intelligence analysts were predicting that the Iranians, who have massed hundreds of thousands of troops augmented by youthful volunteers along the borders with Iraq, might use the start this week of the Moslem holy month of Ramadan to launch a ground attack against the Iraqis.

But other analysts have said that the fact that the Iranians have responded to the stepped-up Iraqi attacks on shipping near Kharg Island by aerial attacks against oil shipping, rather than via ground attacks against Iraq, may indicate a reluctance to initiate another large-scale offensive.

## Danube and Black Sea Linked by New Canal

Reuters

**CONSTANTA, Romania** — A canal linking the Danube River and the Black Sea, shortening one of Europe's busiest inland water routes by 400 kilometers (248 miles), has been opened by President Nicolae Ceausescu of Romania.

The canal, opened Saturday after eight years of construction, is 64 kilometers long and links the river port of Cernavoda with Constanta on the Black Sea coast. The previous route reached the sea via a meander of the Danube known as the Sulina Channel.

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## Fund-Raising Panels Prove Hard to Disband After Mondale's Edict

By Robert Pear  
New York Times Service

WASHINGTON — Walter F. Mondale promised last month to shut down the delegate committees formed around the country to support his candidacy and return all the money they had collected from labor union sources. So far, he has been unable to fulfill that promise.

Officials of Mr. Mondale's campaign for the Democratic presidential nomination said \$400,000 has been put into an escrow account at the D.C. National Bank for repayments, but the money will not be returned until the Federal Election Commission gives its approval. This, apparently, could take months.

A senior campaign official said the process is proving to be a nightmare.

David Iffshin, campaign general counsel, said: "We have had difficulty persuading the delegates, who were acting perfectly legally, to cease and desist. We have to request; we cannot tell the delegate committees to shut down."

Mr. Mondale contends that the committees, formed to support selection of delegates backing his nomination, are autonomous and not subject to his control. Senator Gary Hart of Colorado perceives a pattern of coordination among the Mondale delegate committees, and says they suggest the existence of a network linked together by employees of the Mondale campaign.

Mr. Iffshin explained that after 1976 many people were concerned that grass-roots politics was drying up as a result of campaign finance reforms, so Congress amended the law to increase opportunities for grass-roots political participation. The delegate committees, he said, were one such opportunity.

Mr. Hart, who is Mr. Mondale's leading opponent in the delegate race, contends that the spending enabled Mr. Mondale to maintain momentum at a critical period and helped him win primaries in Illinois, New York and Pennsylvania. Mr. Mondale's aides said the delegate committees spent a total of \$620,000, but Mr. Hart asserts the total was substantially more.

In some states, delegate committees have spent more than Mr. Mondale's national campaign committee, but comments by some of the delegate committee members appear to back Mr. Mondale's position that they are autonomous.

Joanne B. Ciulla, treasurer of the Pennsylvania At-Large Delegates for Mondale Committee, said: "We're not shutting down the committee right now. We think that the committee should stay open, raise more money and send delegates to the convention. That's part of the democratic process."

To cut off what he saw as an unproductive debate over technicalities of the election law, Mr. Mondale announced in late April

that he would treat the delegate committees as having been affiliated with his campaign.

Miss Ciulla said, "He may accept affiliation, but we don't, and it's our committee." Affiliation has major consequences because spending by an affiliated committee would be counted against the campaign spending limit.

Mr. Mondale's aides said most delegate committees, after some resistance, indicated willingness to close down, but few have filed termination reports.

Maxine Isaacs, speaking for Mr. Mondale, said Mr. Hart's charges are viewed as "strictly a diversionary tactic, a desperation move."

She said the Mondale campaign would have to pay a fine because its \$390,883 of spending in New Hampshire, combined with the \$110,000 spent by the delegate committees there, exceeded the limit of \$404,000 for that state — all a consequence of the decision to accept the delegate committees as affiliated.

Meanwhile, the election commission has asked Mondale delegate committees around the country to respond to a formal complaint filed by the Hart campaign, asserting that the delegate committees were acting in concert as part of an overall plan orchestrated by the Mondale campaign to evade political spending and contribution limits.

Treasurers for some of the Mondale delegate committees said they have given evidence to show they were not tied closely to the Mondale campaign. Others said they did not intend to respond.

Herbert E. Alexander, a professor of political science at the University of Southern California who has written on money in politics, said: "There always seem to be new ways, not to evade the law, but to avoid the law. The Mondale delegate committees were used as a means of obviating the overall limit for what the Mondale campaign could spend nationally." He added that it is a perfectly legal way of operating.

The key question is whether the delegate committees spent money "in cooperation, consultation or concert with, or at the request or suggestion of" Mr. Mondale's national campaign. Any such spending would be regarded as subject to Mr. Mondale's spending limit of \$20.2 million in the primary.

In a memorandum to Mondale delegates, and would-be delegates in January, Mr. Iffshin explained how they could set up delegate expenditure committees. In a separate memorandum on Jan. 12, Elaine C. Kamarski, Mr. Mondale's delegate coordinator, said the campaign would "assist each state of delegates in forming a committee" if they wanted one. "As soon as possible," she wrote, "the delegate committees should develop a fund-raising plan."

## Mondale Hopes New Jersey Psyche Will Wince at Untimely Hart Joke

Los Angeles Times Service

LIVINGSTON, New Jersey — This is a self-conscious state, and many here will tell you that they are painfully tired of being the butt of jokes from outsiders.

Aware of that, Walter F. Mondale figured Sunday that his rival for the Democratic nomination, Senator Gary Hart of Colorado, had jarred the tender New Jersey psyche, and all that needed to be done was to keep the matter alive another day.

The issue was a comment Friday night by Mr. Hart in Los Angeles about how he and his wife were dividing campaign duties in the final days leading to the June 5 primaries in California, New Jersey and three other states.

"The deal is that we campaign separately," Mr. Hart said. "That's the bad news. The good news for her is that she campaigns in California, and I campaign in New Jersey."

Thereupon, Lee Hart remarked that she got to hold a koala bear. "I won't tell you what I got to hold — samples from a toxic waste dump," Mr. Hart said. He later said he meant no insult and was only commenting on the problems of having to fly across the country to be with his wife.

Mr. Mondale counted on voters perceiving it as an insult.

"I'm not going to press the point," Mr. Mondale said when it was the first question asked at a news conference. He said Mr. Hart's words should speak for themselves. In case someone had not heard the Hart comments, Mr. Mondale pulled out a sheet of paper and read the quotes verbatim.

"I think that if Gary Hart will simply make it clear that he didn't intend any adverse implications there, make it clear that he's sorry for any adverse implications," Mr. Mondale said. "I think that should be enough."

## Isabel Perón Acts as Broker For Opposition in Argentina

(Continued from Page 1)

Vention of Mrs. Perón, however eccentric, can only improve the government's fortunes. While the union-dominated Peronist party leadership has been unrelentingly hostile to the Radical government, Mrs. Perón has shown considerable admiration for Mr. Alfonsín.

In the last week, Mrs. Perón has won the applause of both the government and moderates in her party by seeking to curb the most fiery Peronist leaders and soften the tactics of the unions. Meeting with Peronist congressmen, she ordered, and received, restraint in a congressional interrogation of Economy Minister Bernardo Grinspun on the foreign debt issue.

In a meeting with the two top Peronist leaders of the national General Confederation of Labor, Mrs. Perón reportedly complained in private of a recent wave of strikes. The veteran union bosses then stood sheepishly beside her for photographs as she described them as "my two sons that God gave me."



**UNEASY LANDING** — Rescuers use cranes to free people caught in a plane ride at an amusement park in Atlanta. A computer malfunction stranded riders for up to four hours. At least 33 of the 65 riders were hurt.

## Pentagon Fears U.S. Biotechnology Could Be Used by Russia as Weapon

By Philip M. Boffey

New York Times Service

NEW YORK — A Defense Department intelligence official says the government is concerned that American advances in biotechnology might be "turned against us" by the Soviet Union and used to create new germ weapons against which there might be no defense.

Dr. John H. Birkenner, a scientific and technical manager for the Defense Intelligence Agency, called Sunday upon the American biotechnology industry to cooperate with the government in identifying technologies that may be dangerous and in taking steps to keep them from potential adversaries.

If such cooperation is not forthcoming, he said, there is apt to be a sharp conflict between manufacturers who want to export biotechnology and government officials who have the task of "rooting out all those who would cooperate with the enemy."

"In such a contest," he said, "government would probably prevail."

Dr. Birkenner's warning, delivered at the annual convention of the American Association for the Advancement of Science in New York, reflected growing concern in military circles over the possible military applications of recent advances in such fields as genetic engineering, recombinant DNA research and cell fusion.

Some analysts have suggested that new gene-splicing techniques, allowing scientists to modify the genetic characteristics of organisms, might eventually yield biological weapons more dangerous than those already known to military scientists.

Whereas existing germ weapons simply disseminate diseases known in nature, such as anthrax or an acute bacterial infection known as Q-fever, the new techniques might produce agents that are even more potent or transmissible. Thus, genetic engineers might splice toxin-

## Nuclear Winter Theory To Undergo U.S. Study If Climatic Disaster Seems Probable, Atomic Powers Could Alter Strategy

By Philip J. Hiltz

Washington Post Service

WASHINGTON — The Reagan administration is embarking on a national research program to find out if a nuclear war would trigger the worldwide weather catastrophe that is now being called nuclear winter.

After initial suspicion within the administration that predictions of a worldwide climatic disaster were political, the president's science adviser, George A. Keyworth, approved the study.

Several U.S. facilities are looking into the problem, including a nine-person team at Lawrence Livermore National Laboratory and a group at the Defense Nuclear Agency. The newly approved program would cost several million dollars a year for three years of study and would include not only calculations on computers but also some experiments in which massive fires would be set to measure their intensity and ability to discharge soot into the upper atmosphere.

It is generally agreed that, if the calculations support the theory of a nuclear winter, major shifts in nuclear defense policy would follow.

If both sides suffer climatic disaster after a strike, then first strikes might be ruled out as too costly even to the aggressor.

"This is a real question of science, one that won't go away, and we can't answer it until we get the data," Mr. Keyworth was quoted as telling Alan D. Hecht, head of the climate section of the National Oceanic and Atmospheric Administration, who is directing the study.

"The policy people want good information. They may use it or ignore it, but they need the information," Mr. Hecht said.

There has been fierce debate about the idea that a nuclear exchange could trigger a cloud of debris that would block out the sun and, perhaps, doom mankind to the consequences of an ice age.

There was even a heated argument in a closed congressional hearing between Carl Sagan, an astronomer who helped with calculations on the effects of a nuclear winter, and Edward Teller, a physicist who said the whole idea is improbable.

It is now suggested by several groups of scientists in the United States and the Soviet Union that a war involving 5,000 megatons about one-third of the world arsenal — could block out 90 percent of the sun's light and plunge at least half the globe into darkness. Temperatures could fall 75 degrees or more, freezing water up to a depth of three feet (one meter), and the key process that supports plant life, photosynthesis, would be blocked.

Whether nuclear bombs can trigger a nuclear winter depends chiefly on a few things about which little is known, such as:

- How many fires are caused.
- How much soot and smoke they emit.
- Whether firestorms are triggered.

- How high the plumes of smoke rise, since particles injected into the upper atmosphere stay there longer and block more sun.

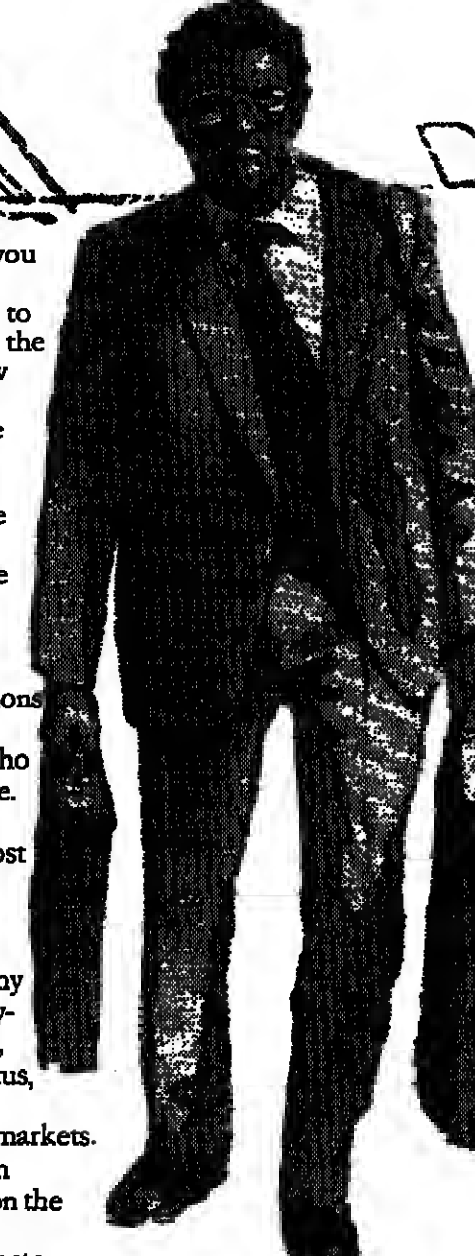
Mr. Hecht said the research program is nearly ready to go to Mr. Keyworth for approval. He said funding will be sought from a supplemental appropriation to the 1985 or 1986 budgets.

## Landslide in China Kills 100

Reuters

BEIJING — About 100 people have been killed by a landslide that followed heavy rains in Dongchuan City, a mining community in southwest China's Yunnan province.

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## Maritime Firefighters Are Busy in Gulf

By Judith Miller  
New York Times Service

MANAMA, Bahrain — Aad W. van Wijngen was painting his bedroom in Rotterdam last month when he heard that the Safina al-Arab, a giant Saudi-owned tanker, had been set afire by a missile in the Gulf.

Twenty-four hours later, Mr. van Wijngen, chief firefighter for Smit International, a Dutch marine salvage company, pulled alongside the blazing tanker in the Gulf.

"I didn't know then whether it had been hit by Iran or Iraq, and I didn't care," Mr. van Wijngen said Saturday in his office in Bahrain. "The fire was my only enemy."

For more than a month, Smit and other salvage companies have been working nonstop. The seagoing firemen have been monitoring their radios, waiting for distress signals that send them rushing into the Gulf to extinguish fires and save the crude oil on ships struck in air attacks by Iran and Iraq.

"We offer what you might call highly unconventional marine service," said Arno L.A. Moonen, Smit's deputy managing director.

The work is extremely dangerous. It can also be enormously profitable under laws of salvage at sea.

Crude-oil fires on ships are a particular problem because the salvage crew must fight 10 or 11 different types of fire simultaneously.

Mr. van Wijngen, who spent 10 years in the Rotterdam fire brigade before turning his skills to the sea, said that his most dangerous mission in the Gulf war has been saving the Al Ahoud, a Saudi-registered tanker that was hit May 7 by Iraqi missiles, as was the Safina al-Arab, when about 80 miles (130 kilometers) southeast of Kharg Island while full of oil.

"Thick black smoke was billowing from the ship," Mr. van Wijngen said. "Oil was spewing out from all over, from the sides, on the deck. The pump and engine rooms were burning. So were the deck and accommodation. Two bunker tankers were ablaze."

To save the cargo, if not the ship, the salvage crew had to keep the fire from spreading so the bulkheads separating the tanks would not collapse.

"We knew if that happened, the entire ship would blow and be engulfed in flame, and a lot of us might be killed," Mr. van Wijngen said.

The Drado, Smit's tug, pulled alongside the Al Ahoud as closely as it could, about 90 feet (about 30 meters) from the flaming ship. Mr. van Wijngen and his 11-member crew began spraying water over the tanker to cool it down.

But a few hours later, "luck left us," Mr. van Wijngen said. A "boilover" occurred. Heat traveled through a layer of boiling oil, which superheated the water beneath. But instead of boiling over from its burning oil tanker kettle, blazing oil was blasted out of the ship by the expanding steam. A huge fireball sprang from the Al Ahoud.

The temperature was between 200 and 300 degrees Centigrade (about 400 and 600 Fahrenheit), Mr. van Wijngen said.

"We were forced to move our fire tug back, first 30 feet, then 150 feet more, very, very quickly," he said.

From that distance, the crew continued spraying water from the tug's pumps to cool the Al Ahoud. Two and a half days later, the ship was sufficiently cool to be attacked by foam.

For 56 hours, the Smit crew and other salvage workers battled the blaze, working in shifts. Mr. van Wijngen said he never slept.

By the fourth day, the firefighting crews were able to board the Al Ahoud and tackle the heart of the fire. Twelve hours after that, the fire was contained.

The ship is a total loss, Mr. van Wijngen said, but on Friday salvage crews began unloading 100,000 tons of crude oil onboard.



The Saudi Arabian tanker Safina al-Arab was hit by an Iraqi missile in the Gulf on April 25.

## Oil Experts Urge OPEC and Consuming Nations to Coordinate Crisis Policies Now

By Joseph Fitchett

International Herald Tribune

PARIS — OPEC countries and oil-importing nations should publicly coordinate their oil-crisis policies now to prevent panic buying if Gulf supplies are reduced, according to a group of energy experts, many with ties to the Organization of Petroleum Exporting Countries.

Informally known as the Oxford Group, the experts, regarded as highly knowledgeable both by oil companies and by officials in OPEC countries, have issued similar policy studies in earlier periods of oil-market tensions.

As an immediate step, they said, oil producers outside the Gulf with spare export capacity should agree to temporarily serve the customers of any OPEC producer in the Gulf whose deliveries were interrupted by fighting.

These temporary arrangements could involve all oil exporters with unused capacity, both OPEC countries, notably Nigeria and Venezuela, Algeria and Libya, and non-OPEC nations, particularly Mexico and Britain.

Publicized agreements along these lines would help deter any Iranian plan based on disrupting world oil consumption. It could also forestall a scramble among oil producers to carve out new market shares in a crisis.

OPEC, the experts tacitly acknowledged, is anxious to avoid renewed turmoil in world oil markets.

Welsh Protest at U.S. Base

The Associated Press  
BRAWDY, Wales — Nine women were arrested briefly Monday as they painted anti-nuclear slogans on a bus stop at the U.S. Navy base here, police reported.

Its fragile market-sharing agreement has weathered commercial and political pressures for many months while oil demand was weak.

On the consumer side, the experts said, Western governments and Japan should prepare now to market oil swiftly from their strategic petroleum reserves in order to keep down prices in an emergency.

They also called indirectly on the government of Japan to restrain Japanese oil companies, which bid up prices heftily on the spot market for short-term oil in 1979 during the change of government in Iran — market pressure that helped double oil prices.

Japan imports all its oil, 37 percent of it from the Gulf. In 1979, major Western oil companies gave priority to Western customers during the crisis, so Japanese companies, feeling cut off, scrambled for oil. Today, however, the Japanese have their own direct supply arrangements and analysts say they are already contracting for crude outside the Gulf but refusing to pay a premium.

Any foreseeable loss of Gulf oil can be offset by other world supplies without a price increase, the experts said. But market psychology could still be affected by a "panic factor." This risk, can only be controlled, they said, by "credible, decisive, coordinated" policy actions by governments to neutralize rumors and dampen speculation.

Stressing the risks of leaving doubts in the marketplace about governments' resolve, the group's report said, in effect, that as producers and consumers shape their plans, they should tell each other and tell the market.

The experts, from both consuming and exporting countries, in-

cluded Marcello Colitti of the Italian oil company Agip; Pierre Despretre, president of the French Petroleum Institute; Ed Fried of the Brookings Institution in the United States; T. Ikuta, president of Japan's Energy Economics Institute; Alireza Parra, executive director of Petroleos de Venezuela; Francisco Parra of the Geneva-

based International Energy Development Corp., and Ian Seymour, executive editor of Middle East Economic Survey, which has often disclosed official Saudi thinking.

The group met in Oxford, England, last week to study the Gulf crisis.

An oil price rise, they said, would harm the entire world economy,

including the outlook for OPEC. Higher oil prices would only be temporary because of underlying weaknesses in energy demand, one expert said, adding: "Panic buying would inevitably be followed by panic selling." Prices might fall below the level OPEC has sustained in recent months through careful

political concertation among producing nations. In the longer run, oil-exporting nations would suffer if another oil shock drove industrial countries further and faster toward other forms of energy.

These investments, which undermine the long-term value of oil, have just started to decline after a year of soft oil prices, the experts noted.

For oil-consuming nations, a spurt in oil prices would set back the world economic recovery and worsen international financial strains, they said. Numerous studies have concluded that higher oil prices, even temporarily, would increase inflation and deepen the uncertainties surrounding repayment of Third World countries' debts.

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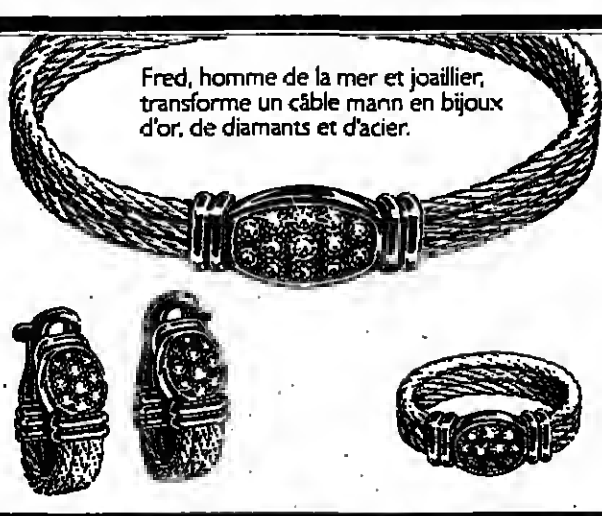
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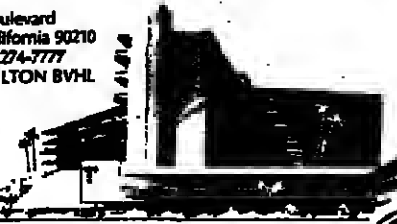
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# Herald Tribune

Published With The New York Times and The Washington Post

## A March Played Softly

A man who once marched in the first rank of a high-school band — because he played the trombone — still remembers how the band played Sousa marches in the Memorial Day parade. Heat casualties were likely in those heavy uniforms, so the marchers formed up early and held to a dignified pace. With that and the meditative attitude of crowds along the way, the band played the Sousa standards — "The Washington Post March," "El Capitán" — softly, and at a stately tempo. And they sounded best that way, for they were carefully constructed, ornate as antique clocks.

The trombonist had lost no loved ones in combat. Yet he felt strongly about the day, and more so each year, especially after Vietnam. He came to understand that remembering war dead is an ambivalent business.

Deaths may have been heroic, in clear defense of the nation. Or they may have been needless, in pursuit of failed or foolish policies. They may also have been something in between and so become the subject of agonizing argument. That is what happened during the Vietnam War. The dead were politicized.

Some honored them not just for their sacrifice but to validate support for American involvement. Others read out the lists of battle

deaths at anti-war demonstrations. Life magazine published pictures of the men lost in a week, in the style of a high-school yearbook.

It took the United States a few years to disengage from war politics enough to give the Vietnam dead the respect they deserved. The nation finally built a remarkable monument in Washington that does not condemn false policy or proclaim false victory. Its only function is to memorialize 50,000 dead.

Perhaps it is never possible to disengage fully from politics. Planning the Vietnam Veterans Memorial stirred a controversy that echoed the war debate. Doubts about the losses of life in Vietnam still echo in Congress, in arguments about Central America. These days, the opportunity for heroism seems slight, the risk of needless sacrifice enormous.

Is awareness of that risk a limit on national power? Yes it is — a profoundly reassuring limit. In fact, the trombonist has come to think that is what Memorial Day is about: that a free, prosperous society places a high value on life and allows doubt about past sacrifice to guide its policy in the present. That is true strength, not weakness. That is playing Sousa softly, with deep respect.

— THE NEW YORK TIMES

## Reassurance in the Gulf

The limits of American power have seldom been so evident as they are now in the administration of a president who came to office declaring that the first requirement was to build and assert power. Central America has been a continuing frustration. Lebanon and the crisis in the Gulf could become the most frightening of all. The Reagan administration, swallowing whatever impulse it may have felt in order in the fleet, is acting with great caution. Everyone is relieved at that. But caution is not a policy, although it is infinitely better than a poorly drawn or inadequately supported policy.

Because it was losing the land war, which it began, Iraq started attacking three countries' shipping to induce them and their Western friends to help it avoid defeat. But Iraq continues its land push and meanwhile it is trying to scare off Iraq's Arab allies by air attacks of its own. If things go on as they are, Iraq's forces could prevail. The conservative Gulf Arabs would not lament the passing of Iraq's Saddam Hussein, whom they blame, correctly, for creating the crisis. But they are deeply troubled, almost paralyzed, by the impact to Iraq's revolutionary fervor. The Iraqi victory would likely give the Soviet Union the Russians. The Soviet Union is emerging as a major player in the

Gulf for the first time. It can influence the military action by funneling arms to a desperate Iraq. It is making itself part of the political action by continuing forward, with a vigor that embarrasses the United States, as a patron of the Arab side. The Carter doctrine and the several Reagan pledges postulated a hostile Soviet Union forcing its way into the Gulf. But here is a friendly Soviet Union ingratiating its way in. The Reagan administration is leery of Soviet motives, but if the tension heights it may have to search for ways in parallel with Moscow to dampen the war.

Earlier, the United States hoped that by dithering politically toward Iraq it could steer events toward calmer waters. Unfortunately, Iraq took the tilt as something of a license to widen the war and started the attacks on Gulf shipping. Now the American emphasis is shifting toward reassuring the quaking Gulf Arabs. The administration is preparing an emergency shipment of Stinger anti-aircraft missiles to Saudi Arabia — a strange military step in light of the Saudis' deep reluctance to use top-of-the-line arms they already possess, but perhaps useful as a stopgap gesture. The continuing requirement is to exercise great caution and, when it comes to acting, to do so in the company of Gulf friends and European allies.

— THE WASHINGTON POST

## Israel and the Settlers

Nothing uglier has gone on in Israel than the growth of an underground Jewish terrorist movement directed against Palestinians on the occupied West Bank. Apart from the death, injury and intimidation dealt to its victims, the darkest aspect of this movement, in the minds of many, was the thought that Israeli authorities might be winking at it or, conceivably, even helping sponsor it. The movement has increasingly challenged Israel's democratic heritage and clouded its moral case against anti-Jewish Palestinian terrorism.

So it is reassuring to see Israeli authorities applying the law against Jewish terrorism. Twenty-seven Israeli citizens have just been charged with criminal violations in acts ranging from the attempted assassination of three mayors in 1980, to an assault on a college in which three Arabs were killed last year, to a conspiracy (it never happened) to blow up the Dome of the Rock mosque, in the planting of bombs (disputed) before they were exploded on five buses in East Jerusalem last month. It was imperative for Prime Minister Yitzhak Shamir to complete the investigation begun by his predecessor, Menachem Begin. He had to overcome the hesitation of many in his Likud party to apply the law that Arabs are expected to obey as well as Jews. For the suspects are not fringe people but representa-

tive West Bank settlers — some serving officers — who, although identified with rightist nationalism, are respected by many Israelis for their pioneering.

Partisans of the settlers assert unconvincingly that government indifference left them no alternative but to defend themselves against hostile Palestinians. A more likely explanation of the crimes is that some settlers hoped to use terror to create panic and thus force large numbers of Arabs to flee to Jordan. This is one familiar if disreputable prescription — not the government's, but one implicit in the thinking of some part of the right wing — for dealing with the Palestinians of the West Bank.

The potential for Jewish terrorism against Arabs will persist as long as Israel rules a subject population by force. So will the menace of Palestinian terrorism against Israelis. The ultimate answer to both lies in mutual Israeli-Palestinian recognition.

But that is some way off. Meanwhile, the Israelis deserve respect for enforcing the law in the toughest circumstances; another test looms in the case of the two Palestinian terrorists who the Defense Ministry now says were beaten to death by security troops after their capture.

— THE NEW YORK TIMES

## Other Opinion

### Hand-Sitting in an Election Year

We have grown glumly accustomed to the quadrennial paralysis which comes over American decision-making in the run-up to a presidential election. But rarely has that paralysis seemed so damaging as during these waiting months of 1984. It was apparent from the beginning that the economic formula on which Mr. Reagan got himself elected in 1979 — low taxes combined with high government spending combined with sustained growth and low inflation — flouted all the laws of logic and sound housekeeping, and could only be propped by some feat of fiscal sleight-of-hand.

The device Mr. Reagan has used to avoid renegeing on his election promises is to pile up a massive federal budget deficit financed by domestic bond sales and by foreign loans.

Yet still, with some American banks (the rashly extravagant lenders of the 1970s) poised on the precipice, with the international currency markets in turmoil and the world's stock markets all on the tumble, the White House sits on its hands — because the elections are only six months away and any drastic remedial action appears tantamount to an admission of failure. It is a depressing thought that so much should hinge on the American ballot box.

— The Sunday Telegraph (London)

### FROM OUR MAY 29 PAGES, 75 AND 50 YEARS AGO

**1909: Italy Stays Out of Crete Affair**  
ROME — At the Ministry of Foreign Affairs I have been told there is no foundation for the statement that Austria-Hungary and Germany have invited Italy — the only member of the Triple Alliance which joined Russia, France and Great Britain in the protection of Crete — to take part with them in proposing a solution of the Cretan question favorable to the ideals of the Hellenes. Italy is not disposed to be a cat's-paw for the benefit of other Powers. Any Power that should propose the annexation of Crete to Greece would have to face the resentment of the Turks, who are not disposed to renounce their nominal sovereignty. The international troops will leave Crete in July.

**1934: Embassy Staff Attacked in Cuba**  
HAVANA — The attempt on the life of Jefferson Caffery, American ambassador to Cuba, was followed by further attacks [on May 28] to terrorize attacks of the Embassy. Four men halted an automobile belonging to a secretary at the embassy, and after smashing the windshield, informed the chauffeur that "you have two weeks to get out." Ambassador Caffery narrowly missed death when a hail of shotgun slugs was poured into the Embassy entrance [on May 27]. Secretary of Education March said the incident "proves the necessity of abolishing the Platt amendment." He said the Communists and the Machado party were fostering the trouble to bring U.S. intervention.



## Sakharov: A Scientist's Rebellion

By Jeremy J. Stone

WASHINGTON — The involvement of the Federation of American Scientists with Andrei Sakharov began nine years ago, in May 1975. He had begun and ended a three-day hunger strike to call attention to the refusal of Soviet authorities to give him, Yelena Bonner, a visa to have an eye operation in Italy. Then, as now, he had not trusted Soviet physicians.

We knew Mr. Sakharov as the most distinguished of the world's atomic scientists of conscience. His efforts to persuade the Soviet authorities to support a halt to nuclear tests and an agreement on anti-ballistic missiles paralleled our work at the Federation. He was the most prominent member of our community. We had to do something. But what?

A month before, we had been invited to attend a Moscow symposium, sponsored by the World Federation of Scientific Workers. So we advised the Soviet Embassy that we would not attend unless Mr. Sakharov's demands were met (as, it later turned out, they were). In November, following the signing of the Helsinki Accords on human rights, the Federation sent me to Moscow to look into the effects of the accords on the rights of Soviet scientists. Among the many scientific dissidents and "refuseniks" I interviewed was Andrei Sakharov. His wife was in Italy, having gained, thanks to his hunger strike,

the right to go abroad. Conversing at his dacha, I speculated that our boycott had played a role in this success. He smiled in an amused fashion at what seemed, in light of the worldwide efforts of his supporters, to be a brash assertion. Being a gentle man, he responded with a humorous anecdote: Two famous men, he said, had taken the matter up with Leonid I. Brezhnev personally. And to both — the king of the Belgians and former Chancellor Willy Brandt of West Germany — Mr. Brezhnev had given the same reply: "Very interesting. This is the first I've heard of this problem of Sakharov's."

Did he know, I persisted, of the significance of July 18, the day on which the visa had been granted? No, he said; he had wondered about that because the day before, Yelena had been told that no visa would be given. (She had replied with characteristic defiance: "No, I will go blind and it will be on your head.")

Did he know that July 18 was the last day of the Moscow meeting of the World Federation of Scientific Workers, and that it had been told this decision was being made as a present to it? Perhaps our boycott of their meeting had been of some help; they had long tried to gain the Federation of American Scientists as a

member. After this he accepted us on a deeper level.

He was, he said, lonely for his wife, with whom he is deeply in love. But then, at least, he had his stepdaughter Tatiana Yankelovich, and his husband Yefrem, and their new child, Marvey. Crowded together in the dacha kitchen with his mother-in-law, it was a scene out of "Doctor Zhivago."

Mr. Sakharov is a patient man, slow to anger, but determined once aroused. Yelena Bonner's family raised his consciousness about the way the Soviet Union is run. He had been working in secret laboratories in a cocoon of what, for a Russian, is exceptional well-being; the life history of the Bonners was quite different.

While visiting us in Washington, the elder Mrs. Bonner, 80, described her sufferings in a Stalin-era prison camp, one located in a desert, where there was constant. She was released after Stalin's death, but was forced to go with her granddaughter Tatiana to small towns, where life was very hard. (The rule was designed to prevent the bulk of the citizenry from hearing about conditions in the camps.)

Such conditions profoundly affected Mr. Sakharov.

So, when KGB-inspired articles attacked Mr. Sakharov as having been "captured" by a Zionist agent, Yelena Bonner, there is, amid the anti-Semitic sneer, the grain of truth: His wife did radicalize Mr. Sakharov, thinking and he is totally devoted to her. It is no accident that two of the three Sakharov hunger strikes have been in defense of her interests; the other was in support of a third party.

After the Soviet invasion of Afghanistan in December 1979, Mr. Sakharov put out a protest statement. In the political rubble of détente, there was no longer any reason for the Politburo to tolerate him. Exiled to Gorki, he was put under a regimen just short of house arrest.

During the first month, letters arrived for him. But after the Sakharovs' tabulated how many were pro and how many were anti, and he refused to be in the war-torn world, all the letters ceased to arrive. One day when they ceased to arrive in some bushes during a walk, a helicopter promptly appeared overhead.

During this period, Mr. Sakharov was able to communicate with the outside world through his wife's frequent trips to Moscow for shopping and conversation. And although his apartment was subject to special jamming equipment, he wrote to us a year later from Gorki that he had heard our voice and responded to our Voice of America while carrying his short-wave radio in the park.

Among his comments: "I know much, though of course not all, about the important work which FAS [the Federation of American Scientists] is conducting in my defense. I heard your speeches on the radio, in spite of the jamming. They pleased me very much. Thanks for 'adopting' me. Undoubtedly, your speeches were well-suited to the more detailed and broader development of a campaign. It seems to me quite proper that FAS and SOS [Scientists for Open Society and Shcharanov] look upon my defense as a part of the campaign for all repressed scientists in Russia."

A second hunger strike was already foreseen in this letter.

By this time, February 1981, his stepdaughter Tatiana and her husband, Yefrem, and another stepson, Alexei Semenov, had emigrated. But the Soviet authorities would not permit Alexei's fiancée, Liza Alexeyeva, to move to Boston to join him. Said Mr. Sakharov: "There is no other reason for holding on to her except the unwise one of using a situation to put pressure on me."

Nine months later, the Federation and a few other individuals and organizations received a personal announcement of Mr. Sakharov's intention to hold a hunger strike, his second. In a letter dated Oct. 9, 1981, he said: "Having despaired to break through the KGB wall by any other means, [we] are forced to begin hunger-strike demanding that our daughter-in-law, Liza Alexeyeva, be allowed to leave the U.S.S.R. to join our son." (By then, the couple had been married in a proxy marriage in Montana.) The strike began Nov. 22 and lasted 17 days. On the 13th day, just as in Soviet labor camp regulations for hunger strikers, the Sakharovs were hospitalized.

The Federation telegraphed Mr. Sakharov three days after the strike began: "Attention has now been drawn to this problem. It may not be possible to secure results immediately. The Federation of American Scientists asks you to discontinue the hunger strike while your supporters work to help you achieve your goal. The world needs you."

The KGB had evidently let the telegram through, no doubt because it seemed to serve its purpose. On Nov. 30, we got Mr. Sakharov's answer: "I can no longer believe in the kind of promises of the authorities not backed up by action! I ask you to understand and take this into account. With esteem and thanks."

This answer on the eighth day of the hunger strike, along with the long-awaited news stories from Moscow, produced some constructive results. The next day, placing quiet telephone calls, we were able to induce, among others, two former secretaries of state, one former president of the United States and a former ambassador to the Soviet Union to call the Soviet ambassador in Washington to express concern.

In the end, the Sakharovs were not forced. Each was told the strike was dying and urged to eat. But they held to their fast. On the 17th day of the strike, a high KGB official came to Gorki, and assured Mr. Sakharov that if he discontinued the hunger strike, his daughter-in-law would be permitted to come to the West.

President Brezhnev had given in and, subsequently, he permitted two other such visits — in one of them Yelena Bonner even visited Boston without attracting attention.

The writer is director of the Federation of American Scientists. This is the first of two articles contributed to the Los Angeles Times.

## When a Knee-Jerk Interventionist's Knee Won't Jerk

By William Safire

WASHINGTON — "Nothing that is not a real crime," wrote Joseph Addison, "makes a man appear so contemptible and little in the eyes of the world as inconsistency."

I feel the onset of inconsistency. My knee has been tapped in just the right spot and it fails to jerk. All my life I have been an interventionist in foreign affairs. In White House days, I wrote a Nixon speech denouncing the neo-isolationists. And in two of three great issues now facing the country, I see forthright and courageous interventionism as the paramount national interest.

In Central America, none of this halfway stuff for me. The Congress is willing only to appropriate some money for El Salvador to defend itself and keep from losing for awhile, until we Americans get bored or until the Salvadorean elect a government too far to the right. That faint-hearted philosophy is: Millions for not losing, but not one cent for winning.

The interventionist says: If Central America is worth defending, it is worth defending in a way that permanently removes the source of trouble. Sure, the theory is that the source is poverty or injustice, but the condition is that the source is the Communist dictatorship in Nicaragua trying to overthrow its non-Communist neighbor. So we are right to make the aggressor regime's life miserable until the Sandinistas realize that guerrilla subversion can be a two-way street.

In international finance, the interventionist says: The freedom to fail does not include a license to start a chain reaction of failures. The decisive intervention last week by the Fed and

the Treasury to stop the run on the Continental Illinois Bank was a case of "enough and on time," a combination of gold and grit that removed all debilitating doubt.

Of course, whenever government guarantees bank deposits, the mismanagement and directors must be fired and the stockholders must suffer; banks whose depositors are made whole by the public must accept the discipline of one-way regulation. Such are the costs of a protective strike on panic.

In the Gulf, the interventionist says: This waterway is vital to the economy of the Free World and we must offer our military support to the oil producers and their customers who may be affected by the war between Iran and Iraq. But here is where the knee does not jerk. The notion that the United States should treat the Arab region's interests, and the European and Japanese customer interests, as a vital U.S. interest is middle-headed.

The United States has sold to Saudi Arabia 60 F-15s, the world's most powerful fighter-bomber, and enough AWACS aircraft to command a devastating air war. The Saudis have hired capable Taiwanese mercenary pilots to operate this sophisticated equipment. If the Saudis are unwilling to use this striking power to defend their life's blood from attack, why did they buy all that equipment? (The answer is to contribute to the threat to Israel, but that is not why the Carter-

Rengan strategists sold them the weapons.)

The spectacle of a superpower pleading with Arab leaders for the use of bases from which to defend Arab oil is repugnant to even the most avid interventionists. Symbolic acts — such as rushing Stinger missiles or additional equipment to recipients who would be afraid to use it — are equally absurd.

The blood feud between Iran and Iraq is for those totalitarian states to settle. The oil impact on Western Europe and Japan is for those democratic states to consider and perhaps for them to organize a collective defense. So long as the Soviet Union does not move in, the United States should not move in; indeed, such a policy of watchful waiting would prevent escalation of regional and religious score-settling into a superpower confrontation.

That is what has turned me into an interventionist. We should fight the good fight and fight it to win; we should scrupulously avoid fighting any unnecessary fights at all.

This philosophy of selective involvement, of critical-mass commitment, may not seem consistent on the old hawk-dove scale. In Walt Whitman's words: Very well then, I am inconsistent.

The symbol of interventionism is the eagle's head on the long neck of the ostrich. It is capable of sticking its beak fiercely and decisively into those crises where it has the interest and power to shape events, and is also able, when its presence is unappreciated or redundant, to thrust its head determinedly into the sand.

The New York Times

## Dynamics of Escalation: The Steepening Slope

By Anthony Chapin

STONINGTON, Connecticut — Three score and 10 years ago, World War I shattered a self-confident civilization at the summit of its achievement. Now we are looking at a world again divided in half, and under the guise of aiming to preserve peace, preparing for another incomprehensible catastrophe.

We find the same calculations, the same misperceptions, the fears and tensions that finally on the morning of Aug. 14, 1914, sent German troops flooding across a neutral border on a pre-emptive strike against France, precipitating devastation that no one had imagined.

What are the similarities between now and then? There were two alliances, each with its clientele of smaller states, each sponsoring movements of liberation or suppression, each fearful of seeing the other gain a new foothold anywhere in the world. Power seemed to breed wild miscalculation.

The sea in 1914 was what the sea and space together are for us. To control what moved on it from one country to another was to control nations' lives. There was no limit to the technology lavished on navies.

Germany, the "encircled" land power, built its navy on the theory that it would force England, the world's "policeman," to share its place in the sun. This supposed "bargaining chip" spurred the British to develop a superweapon, the battleship Dreadnought, which in turn forced the Germans to build better battle cruisers for their own. Technology gave birth to military-industrial complexes, and foreign policy became increasingly hostage to domestic interests.

The British naval chief, Admiral John Fisher, talked of "Copenhagening" the German fleet in its berths before it could challenge the British — a simple first-strike idea. Admiral Alfred von Tirpitz detected a "danger zone of inferiority" — "a window of vulnerability." If you prefer — that the intensified German naval building program would close. The British admiralty knowingly overestimated its estimate of German forces to Parliament in order to justify further appropriations.

This process of escalation applied ominously to the growing weight of land armies. In response to the Germans' declared "world policy," the British conceived the counterpolicy of "containment" and began planning a British Expeditionary Force. America speaks today of a Rapid Deployment Force.

Some thought that the great powers' new military technology would act as a deterrent. "I hope that peace may be maintained," said Edward VII during the Balkan crisis of 1908-09, "but only because Europe is afraid to go to war."

The use of military bluff for political gain, the ratcheting up of appropriations for arms and men, the search for new collaborators who might skew the unstable balance of power in one's favor — all this heightened opponents' fear of each other and deepened indulgence for

the ambitions of allies. The "we-they" mentality took over. "Our" actions were justified by national interests; "theirs" were not.

Pressure built to the point where any compromise was construed as a battle loss. There was no room left for diplomatic maneuver.

Those who made the decisions could not have foreseen what together they were doing. Their fascination with the dramatic linkage of move and countermove obscured the process. It was the dynamics of this process, its self-propagation, that caused the war. We are caught on the same deadly treadmill.

This psychological mechanism of escalation must be recognized and

examined. In an atmosphere of crisis, a sense of caution, an instinctive flight to security, drove even reasonable people to fall back on the one sure material guarantee that they knew: force.

Somewhere in the sequence of steps that each government took to guarantee its national security — steps that seemed thoroughly justified at the time — a watershed was crossed. The slope steepened, the pace quickened and then it was too late. Procedure took over.

The obsession with security guaranteed disaster. Governments had no policy for the purpose of reducing the causes of war.

An exceptional leader, sure of his

own judgment, in control of his subordinates and commanding the ability to respond if fired upon, could have said this:

"No. The danger that our opponents will attack first is a lesser danger than the danger of war itself. I will accept the calculated risk of a military disadvantage and will not take the next step toward war."

There was no such leader.

Clearly, at some point in the preparation for war, the process becomes irreversible. No one can tell when. We only know that continual escalation will end in catastrophe unless that process is reversed.

The writer is an architect and translator. He contributed this comment to The New York Times.

## Good Reason for a Chemical-Arms Pact

By Enrico Jaccia

ROME — The Soviet Union recently tested a missile warhead that is specially designed to spread chemical agents over a large area upon re-entry into the atmosphere. It is strange that such a piece of information, revealed a few weeks ago by "Aviation Week and Space Technology" and subsequently confirmed by several sources, has made little impression. Such a weapon could be used in a missile-vector chemical attack on the United States, or more probably, on Western Europe.

Meanwhile, some defense analysts are saying that the United States has adapted cruise missiles for the same purpose. The use of chemical weapons, traditionally restricted to the battlefield, might then be extended to cities and entire populations. This should be a further, compelling reason for reaching a quick agreement on a chemical weapons ban.

The United States has submitted to the Conference on Disarmament in Geneva a draft treaty on these matters. The Russians immediately rejected it. The conference adjourned, once again, without any result. The issue quickly faded from view.

The draft treaty submitted by Vice President George Bush addresses all the major issues and rightly focuses on verification matters. But the Russians are exceptionally touchy on this issue. They do not want foreign inspectors in Soviet facilities. They have made some movement, however, in the right direction. Reportedly the Russians are ready to accept some sort of on-site visits by foreign inspectors to verify the destruction of chemical weapons stocks. These reports, if true, would represent a gigantic step by the Russians.

But the destruction of existing stocks is only one problem, and not the main one. The real obstacle is the inspection of production facilities. If we cannot go and see what the Russians are doing, the Americans say, we cannot trust them to comply with the treaty. They have violated too many agreements, particularly through the use of chemicals and mycotoxins against rebels and civilians in Afghanistan and Eastern Asia.

### Libya and U.S. Blacks

Regarding the report "FBI Investigating Reports That Libya Illegally Aided Black U.S. Activists" (May 10).

I have little doubt that Libya has provided financial grants to selected black organizations, but this report detailed few if any facts supporting the contention. Were the purported donations made to the Black Caucus, the now defunct Black Panthers or the Rev. Jesse Jackson's Operation PUSH? From the report, we obtain only the sick feeling one derives from an overdose of sensationalism.

The omission of facts, however, was not the greatest fault of this report. The thrust dealt with Libyan hit squads and reports of a possible Libyan-inspired assassination plot against the U.S. ambassador to the United Nations, Jeane J. Kirkpatrick. The report makes no direct association between the assassination plots and the contributions to black activist organizations, but there is association by inference.

Certainly no black organization

prominent enough to influence international relations would endorse such blatant acts of terrorism.

MAJOR CURTIS E. SPENCER  
Torrejón Air Base, Spain.

### Sour Note on Big Bands

John Wilson's nostalgic feature on the Glen Island Casino and the Big Band era ("Glen Miller Band Still in the Mood" May 17) brings back bright, delectable memories of a musical Camelot. When knighthood was in flower and there was still music in the land. When the moon rose out of Long Island Sound and the ballroom doors were open wide on a warm night. And Glenn Miller's sax on "Lamplighter's Serenade" — could there be greater enjoyment?

The only sour note: author George Smoot's quote, "That made him [Glenn Miller] the Michael Jackson of his day." Michael Jackson? That's like saying, "That made Christ the Oral Roberts of his day."

JOHNNY BALLARD  
Miami.

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# TELECOMMUNICATIONS

A SPECIAL REPORT

TUESDAY, MAY 29, 1984

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## Codes and Ciphers: How Public Wants To Remain Private

By Arnel Kornel

PARIS — Kings, generals and criminals have long favored the use of secret codes and ciphers to communicate the details of their sundry intrigues. By making or breaking such codes, cryptographers have accommodated or frustrated many an ambitious plan.

Now cryptographers are being called to a new task, and the public at large is their client. "No longer do statesmen or the military have a monopoly, or even the most pressing need for cryptography," said Gus Simmons, manager of the mathematics department at the U.S. government's Sandia National Laboratories in Albuquerque, New Mexico.

As electronic information networks spread worldwide into homes and businesses, users of these new communications technologies are becoming increasingly vulnerable to the intrusions of electronic eavesdroppers and thieves. "This is one of the most pressing problems of our time," Mr. Simmons said.

But while the information age draws closer, little is being done to assure the security and secrecy of the electronic communications, which will form its matrix.

"Except in very sensitive communications, I must say that the problem of security has been neglected," said Norbert Cot, professor of computer sciences at the Sorbonne University in Paris.

Last year the public's attention was drawn to the need for protecting computer-stored data after young hobbyists electronically broke into several U.S. computers. But the need for security does not stop at the computer port. Much stored information will eventually be transmitted to other computers.

Satellites, cables and the air waves are the principal carriers of modern communications. Television and data are broadcast via satellite or microwave and distributed terrestrially by metal wires or glass fibers. Telematics applications link up computers in homes and businesses through public telephone networks. Enormous amounts of money and information are being exchanged electronically.

Despite the rapid development and proliferation of these new communications technologies, the need for security is often disregarded. "At the moment, most companies try to avoid it," said Oswald Ganley, an executive director of the Information Resources Policy program at Harvard University. "Large banks encrypt as little as they can," he added.

This neglect is rarely due to a lack of technical solutions. "This is not a question of encryption technologies not being available," Mr. Ganley said.

"There are some demanding technical questions remaining," said Mr. Simmons. "But the technology at this time is ahead of the needs."

The stuff of modern communications, digital bits of data or electro-

(Continued on Page 11)



## The Satellite Game: Is the World Running Out of Space in Space?

By Jonathan Miller

WASHINGTON — Since 1962, when the tiny experimental Telstar satellite inaugurated the era of global satellite communications, the United States has never lost its lead as the dominant player in the satellite game. But an awareness is growing in Washington that the United States is losing its grip on the world's satellite communication business.

Next month in Geneva, hundreds of technical experts from around the globe will gather to prepare the agenda for next year's World Administrative Radio Conference (WARC) on communications satellites. The preparatory meeting, and the formal conference to follow, have become a matter of concern in Washington. Some administration, congressional and industry officials fear that developing countries will use the forthcoming space conference to seek to impose a new international regulatory regime that could possibly inhibit the United States' freedom to make use of the geostationary satellite orbit.

At first glance, it seems almost absurd that the unbounded reaches of outer space could become the subject of a parking dispute. But all space is not equal. The particular orbit for the locating of communications satellites is in a narrow arc of space that is perpendicular to the earth's equator at an altitude of 22,300 miles (36,150 kilometers). Satellites can be launched to hover in this orbit and be used to relay pictures, voices and computer information between transmitting and receiving dishes on earth.

In the current process for dividing the use of the orbit among countries — a process the Americans would like to preserve — the international "coordination" of satellites is presided over by the International Frequency Registration Board, a unit of the Geneva-based International Telecommunications Union. Called "more a blind headwaiter than a traffic cop" by Brenda Maddox of The Economist of London, the board accepts advance notifications that countries intend to make use of orbit slots, and notifications when the slots are actually used. But in the event of a conflict, the board cannot issue edicts or award satellite parking spaces. Countries must sort it out themselves.

The ITU can be dangerous, in the view of some Americans, because like the United Nations the voting majority is composed of developing nations. And the developing nations have a good debating point. When they are ready to put up a satellite, how do they know there will be some place for it to park?

Until now, claims to the orbit by developing countries have been largely theoretical. Only a handful of states have possessed the financial resources and technical ability to put satellites into the satellite orbit. But the once-exclusive satellite club is under pressure to admit more members. Two developing countries, China and India, already possess experimental versions of the rockets required to put satellites into the geostationary orbit. In the next few years, as they refine their techniques, they will offer their capability to other developing countries.

For strictly commercial reasons, the United States, the European Arianespace organization, the Japanese and even the Soviet Union are seeking a share of the commercial business in satellite manufacturing and launching. While the 100 or so satellites now in space are almost all owned by the rich countries, the prospect for the next decade is for increasing numbers of satellites to be launched by or for developing nations. Indonesia and India already own satellites. Over the course of time, many more are likely to own them. The question becomes: Will there be enough room for all of them to park?

To the notion that the orbit is becoming overcrowded, and that resources will not be available in the future to satisfy the needs of developing nations, the U.S. Federal Communications Commission replies that this "is a very unfortunate but widespread misconception with little basis in fact."

On a technical level, the Americans seem confident that technical improvements to satellites will assure access to the orbit for the indefinite future. While the typical satellite in use today can provide two dozen television channels or about 30,000 telephone circuits, on the drawing boards are designs for future satellites that could triple or quadruple this capacity. Eventually, the Americans believe, the answer to satellite congestion is to build better satellites.

But the great fear in Washington is that the WARC will not deal with the problem on a technical level, but instead will choose to attack the problem on a political basis. The WARC is sponsored by the ITU, an affiliated agency of the U.N. A one-nation one-vote forum, the ITU has given some heartburn to developed countries in recent years, as developing countries have claimed rights to more of the radio spectrum and satellite orbit.

Seen from the viewpoint of the developing countries, the issues are not only technical and political, but also economic. While it may be true that new kinds of satellites could be so efficient as to eliminate the congestion in the geostationary orbit, such new satellites are likely to be extremely expensive and to be of little value to small, poor countries that are seeking to implement only basic systems for which high levels of technical sophistication may be too complicated and too costly.

But U.S. satellite operators are highly skeptical of such assertions. They point out that the only real

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## Video Brings A New Style To Meetings

By John F. Budd Jr.

FARMINGTON, Connecticut — Business is getting booked on video.

The television screen and the 17 \$100-million communications satellites now orbiting in fixed positions 22,300 miles (36,150 kilometers) above the equator, pose powerful influences on business communication, which consumes billions of dollars, pounds, francs and Deutsche marks each year.

Wired together, the two technologies promise to make video-conferencing, the electronic meeting, the routine by 1990.

The numbers are impressive. Video-conferencing's share of the nearly \$900-million teleconferencing market in the United States alone is projected at \$360 million.

Intelsat, the 106-nation commercial communications-satellite system, predicts the demand for international satellite circuits will rise 85 percent over the next four years.

Granted, this is primarily focused on mundane telephonic traffic, but the video-meeting capability will be an important byproduct as the sharply rising cost of international travel built into corporate conferences makes time-saving and cost-cutting techniques a

(Continued on Next Page)

John F. Budd Jr., vice president, external relations, for Enhart Corp., has been experimenting and innovating with video since 1979. He is the author of "Corporate Video in Focus."

## Braving the New World of Motherless, Teleparental Homes

The real social advance presented by the new technology will enable women to get out into the outside world while allowing them — because of the miracle of telecommunications — to reach back into it to keep touch with their children and maybe even to bake the bread.

By Brenda Maddox

LONDON — There is a myth making the rounds that ought to be stopped. It goes under the name of the Home Work Station or the Electronic Cottage and usually appears, illustrated, in any survey on telecommunications and the future.

The illustration is inevitably a cartoon, for what lies ahead is thought to be jolly. It shows a high-tech professional seated at a desk equipped with a computer, linked to a satellite, a fast printer and a smart telephone. In the background there are curtains, flowers and other accoutrements of that place called home. One can almost smell the bread baking.

What is wrong with this picture? Two assumptions. One, that the liberated worker is a man; the other is that anybody, of either sex, will be happy to stay at home all day, isolated from colleagues, lunch companions, gossip, random information.

The future is not going to be like that at all. What lies ahead is not the paperless office but the motherless home, the new world not of the telecommuter but the teleparent.

If evidence were needed, the divorce rates alone should provide it. "Homes" now break up at the rate of one out of

three (one out of two in sunnier climes) and a mass investment in equipment which coops husband and wife together for 24 hours a day is an invitation to mass divorce. Furthermore, it should be obvious to anyone who has read a newspaper in the last 10 years that women are rather eager to get out of the home.

The real social advance presented by the new technology will enable women to get out into the outside world while allowing them — because of the miracle of telecommunications — to reach back into it to keep touch with their children and maybe even to bake the bread.

A few pioneers already are using teleparenting technology.

The wife of a cellular-radio executive in Virginia has her own car equipped with the latest of this form of mobile telephone, which can be reached, wherever it is, by a call dialed anywhere in the international telephone network. When she wants to know where her children are, she sleeps their radio pagers (why should doctors have all the best technology?) and they go to the nearest telephone and tell her.

Mother and child are thus bound together by a wireless umbilical — a bond that, provided the children are old

enough and trustworthy, allows good mothering without any danger of smotherlove.

For the would-be electronic family, a good telephone answering machine is essential. It takes messages for all of them and from all of them.

No more fights about who did not say they would be late home to supper. Each, armed again with a bleeper, can ring the machine from any distance, take the messages off and put new ones on.

There is nothing futuristic about this device. Answer Call, a London supplier of answering machines, said that a few years ago almost all of its sales went to business users. Now, about a third of its monthly sales of 3,000 units go to the domestic market, and the proportion is rising. Some families even use them to preserve peace at mealtimes.

As it is a well-known fact that as soon as a family sits down to eat, the phone rings for one of the children, these well-equipped families religiously turn on the answering machine for the duration of the meal.

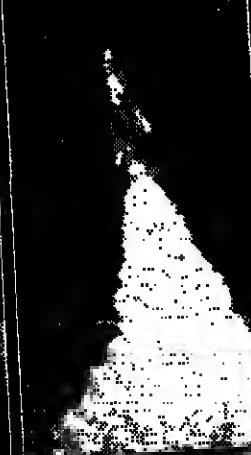
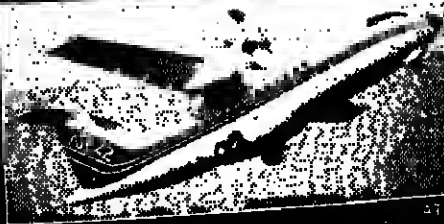
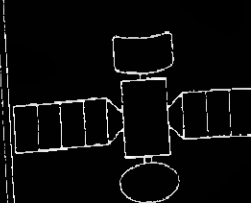
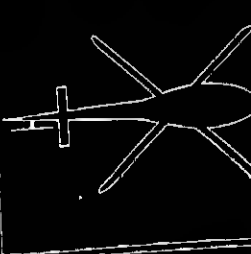
The working housewife, of course, awaits the arrival of the robotic housekeeper, which will move from room to room

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## TELECOMMUNICATIONS

## Use of Video Brings a New Style to Conferences

(Continued From Previous Page)

priority. Video-conferencing is costly, from \$10,000 to \$40,000 an hour of transmission time from New York to London. Technology is having an impact on such costs, much the same as it reduced hand-held calculator costs from \$50 to \$9. Technology in the form of compressed digital signals, is offering a one-hour rate for video-conferencing between New York and London for \$2,900 (AT&T's "picture-phone service").

Even this will be topped by the Intercontinental Hotel-Intelmet system (New York and London), which is expected to offer in June a 70-percent reduction in video transmission costs. This would bring the tab for one hour of two-

way video between the two cities to well under \$2,000.

In essence, a compressed signal permits the transmission of more television signals per satellite than the present system — on the order of 1,544 megabits per second compressed signal. This means that almost all of these signals can be transmitted on a single radio bandwidth needed for 54 "analog" signals, thus extrapolating the savings, inasmuch as communication satellites have limited transmitting capabilities.

But one need not seek justification in such arcane analysis. Under any bookkeeping system, the savings are still impressive.

AT&T estimates that its long lines personnel saved \$924,000 in travel costs in a year by using its

own teleconferencing rooms. Aetna Life Insurance said that its embryonic in-house system initially covering two facilities 10 miles apart saved about 6,000 hours of travel time in a year. Atlantic Richfield expects to justify its \$17-million private two-way video network by saving \$7 million a year on executive travel.

If it needed a practical boost, the 1981 U.S. air-traffic controllers strike gave strategic impetus to the concept of video-conferencing — the instant meeting, courtesy of satellite messengers without dependence on erratic air schedules.

It forced companies to explore alternate means of meeting. It saved, for example, Celanese executives that year \$7 business trips in the first five months, roughly representing \$26,000 savings in air fares alone.

Emhart held an hour-long financial analyst presentation, simultaneously in New York and London via a fixed facility linkup, via satellite. It represented a 34-percent, or \$15,000, savings over the conventional two meetings in each city to cover the same ground.

In the United Kingdom and Europe, where emphasis is on cable television's development, the interest in creating new industry and fighting unemployment will, inevitably, focus on what business video-conferencing can generate. It is, after all, a practical catalyst to business development as much as it is a technological advance.

While even in the United States the early euphoria has gone, all governments are staying the course. For example, Britain is expected to spend \$3 billion over the next decade to develop cable television; West Germany, \$550 million, and the other Western powers are expected to follow Britain and West Germany's lead albeit more modestly.

Video-conferencing has its own identity problem. Teleconferencing is a generic term. It can mean — and it most often does — simply a two-way audio network. This has been around for decades. Or it can mean a linkup involving one-way

video (picture) and two-way audio, the most popular use.

True video-conferencing — the real wave of future business communication — means "two-way, interactive video." You see them as they see you — and you can talk to one another without impediment. In trade jargon, this is called "full-motion video-conferencing."

Private built-in networks with this capability can cost upward of \$750,000, while "ad hoc" one-time bookups via a host of suppliers and video contractors can range in cost from \$2,000 for limited linkups to \$400,000 for large-scale multicity presentations.

Not deterred, innovative U.S. companies are pursuing it. Hewlett-Packard is building a \$1-million, 50-site network that the company estimates will pay for itself in one year. Among the hotel chains, Holiday Inn is the most aggressive, spending \$10 million to equip and tie together 33 of its 1,700 hotels into its own video-conferencing chain (Marmot, Sheraton, Hyatt and Intercontinental have followed suit on a less grand scale).

The current history of video-conferencing reflects many of the paradoxes of the technology's advance. The pioneering company set up to transmit corporate information this way — Satellite Business Systems — has been a financial disappointment, contradicting every economic study about the future of this business.

The plans for launching 200 additional communications satellites over the next 10 years — 34 in the next three years — runs in face of a current "transponder glut." According to a Federal Communications Commission study late last year, only 54 percent of the capacity on communications satellites was being used, and 143 of 312 existing transponders were idle.

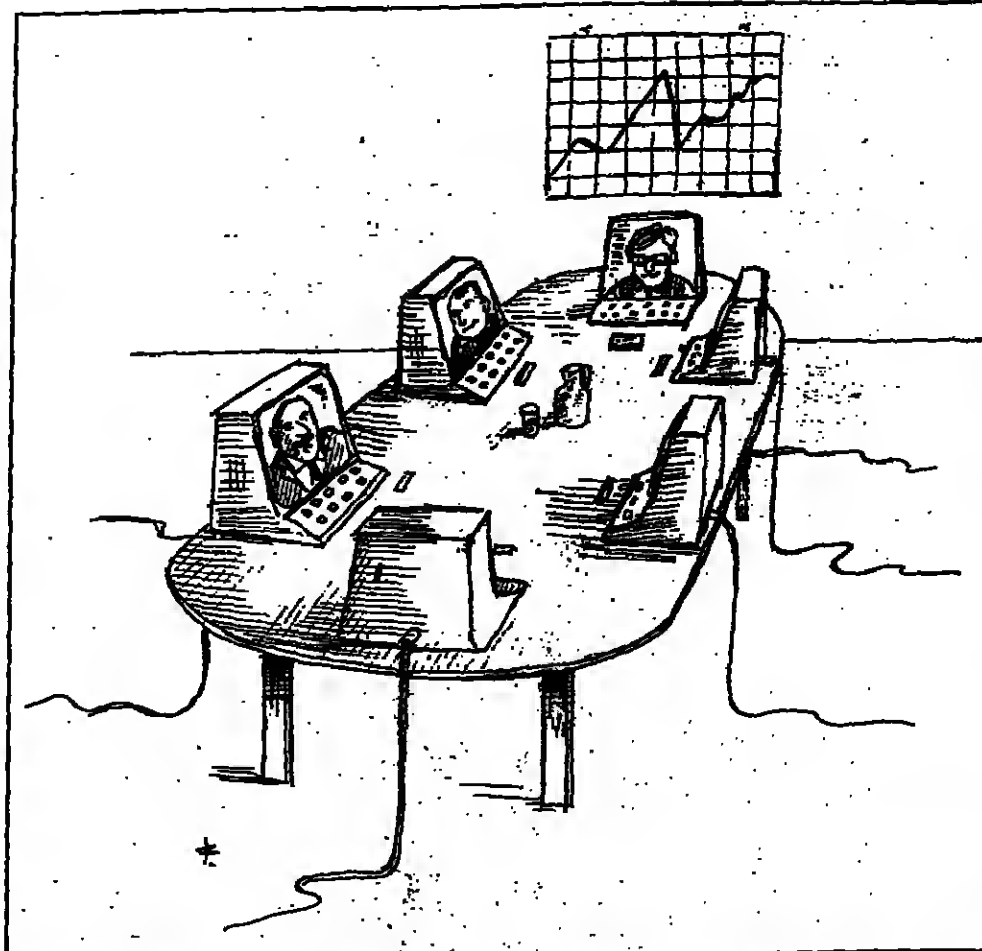
(The transponder receives the program-carrying signal and translates it into broadcast frequency, amplifies it and transmits it.)

Present video-conference applications range from the U.S. Information Agency's five-satellite network called Eurostat, part of a planned worldwide system called Omninet, to the U.S. Catholic Conference's \$6-million network covering 180 dioceses. In 1982, Johnson & Johnson went public during the Tylenol scare via a 30-city live by satellite news conference.

Further evidence of the flexible use of video-conferencing was demonstrated when Sacramento, California, law-enforcement officials invested \$2,600 in a one-time, one-way video-conference to enable two elderly female witnesses in a Maryland murder to view a lineup of suspects. Another example is a live two-way interview by reporters for Emhart's worldwide newspaper on youth activities, bringing together U.S. and British officials in youth groups in an hour-long interview for \$650 that would otherwise have cost \$5,000.

Although it has the potential to save millions of dollars, some business executives are understandably uncomfortable with the "tube." Off-camera remarks have been heard. One executive mistakenly put on his wife's obviously feminine glasses, others have found voice-activated cameras swinging to shots of waving arms and coughing participants, while the expected amateurishness of lighting has made some corporate chieftains look wrinkled and grizzly.

Such technical drawbacks aside, the reports are positive. AETNA, which in its initial two-city linkup ran 10,000 employees through 1,400 meetings, feels that the meetings were better disciplined, with



more concise agendas and were more tightly organized than face-to-face meetings.

At Emhart, in the five years of harnessing video we've found that the participants forget the technology after the first five minutes and the meeting flows as well as any in-person get-together.

Richard Bodman, president of Satellite Television Corp., a Comcast subsidiary, believes that video-conferencing will create more meetings rather than less. He

thinks the broader involvement of more executives of managers, electronically introducing them to each other, will stimulate interest in further meetings on a face-to-face basis.

Corporate junkies may feel their golf and tennis outings threatened, but, those who pay the bill — the shareholders — will reap a substantial reward beyond the savings gained on corporate travel.

(The annual meeting is an event just waiting for video to take it out

of the regional closet and expose it to all shareholders. Companies laying out \$150,000 to \$750,000 to videocast a two-hour annual meeting will take a hard look at the regular dry, dull formats consisting largely of parliamentary procedure and proxy report readings.)

So, video may transform these annual rituals from sleep-inducing corporate sermons to more lively audience participation events — and that is as good a motion for adjournment as there is.

## Braving the New World Of Teleparental Homes

(Continued From Previous Page)

absorbing dust. Before that treasure arrives, however, she will come to rely on the home communications center. It will not only handle the telephone calls but switch the lights on and off, turn on the central heating and the oven, thus performing many of the most important functions of a mother, with added advantages: it does not become alcoholic or agoraphobic from being shut in all day and it does not sulk when you forget its birthday.

Teleparenting may sound cold and calculating but it is nothing new. Parents begin it the day when, taking Dr. Benjamin Spock's advice to put the baby in a separate bedroom, they buy a little listening device so that when the baby is not crying they can run into its room to find out why not.

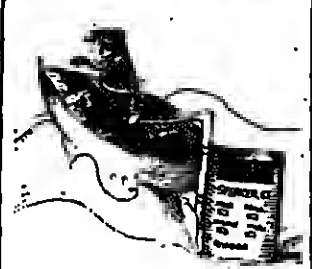
In time, they turn to parenting by telephone. First comes the day when they realize that leaving a telephone number with the child in the evening is cheaper than a babysitter. Then, there is the later stage, when the parent is left at home and the child is out. Many parents have relied on the telephone-plus taxi, damn the expense, as a solution when confronted with the post-midnight telephone call from a 14-year-old announcing, "I can't get a ride home from the party so it is all right if I stay all night."

The fact is that until now, teleparenting, like the working mother, has been invisible. The New York Telephone Company some years

ago struggled to explain the unexpected surge of telephone traffic about four o'clock in the afternoon. Research revealed that it was latchkey children returning home from school telephoning their mothers at work to find out what was for supper. And all working mothers know that you can tell a bedtime story over the telephone. Sharp demands like "Have you done your homework?" and "Have you fed the cat?" draw less counter-argument.

New technology will only refine these time-honored techniques. Parents, eager for all the aids they can get, are snapping up electronic alarm systems intended to protect the elderly and using them to detect when their toddlers are wandering out of doors or into the wrong room. Coming soon is the electronic bracelet, which emits a signal to let the base station know how far the wearer is from home. True, it is being developed for the police as an alternative to probation but that is no reason why it, like so many other industrial inventions, will not find its best market within the home.

None of this is to say that new communications technology will not reduce commuting. It will free people to live where they want, not in crowded suburbs. But all the evidence is that a majority of both sexes prefer to exit through the front door to perform what the worker calls work and to preserve home (the place where the answering machine is) as the haven to come back to at the end of the day.



## AT&amp;T Breakup Brings Rapid Stock Price Shifts

By Merrill Brown

NEW YORK — The picture for stocks in the rapidly changing U.S. telecommunications market has been turned upside down by the breakup of American Telephone & Telegraph Co.

No longer is AT&T considered the safe investment for long-term investors; and, in large part, it has been replaced by the new darlings of the investment world — the seven regional telephone companies spawned by the dismantling of the AT&T telephone monopoly.

But in addition to creating new

investment vehicles, the breakup also has led to the growth and development of a host of manufacturing and service concerns that build telecommunications switching devices, telephones and other products and offer long distance through a voice communications market poised for frenetic competition.

Another factor further complicating the evolving investment picture in the United States is the continuing fallout stemming from the Federal Communications Commission's ongoing effort to resolve the issue of access charges — the charges long-distance carriers pay to link their microwave services to local telephone subscribers.

Among most Wall Street securities analysts there is little short-term enthusiasm for the prospects for AT&T stock. "We're recommending sale of AT&T stock, and use of the money to purchase GTE, Continental Telecom or the regional companies," said Edward M. Greenberg, an analyst at Sanford C. Bernstein & Co. "It is fairly valued and there is a lot of risk to the earnings."

Since spinning off its 22 local phone companies into seven regional companies on Jan. 1, AT&T has been beset by a host of problems, including continuing erosion

of its market position in long distance and marketing difficulties with its telecommunications products.

Most AT&T watchers say it is unlikely that the company will earn the \$2.02 a share AT&T predicted it might earn last fall when issuing an investment prospectus after the breakup. Some analysts, like James McCabe at Prudential-Bache Securities, think that figure could fall as low as \$1.20 a share particularly in light of the company's first-quarter profit total of \$227 million, which amounts to 20 cents a share.

On the other hand, it is possible to find enthusiasm on Wall Street for virtually all the regional companies. Bernstein's Mr. Greenberg, for instance, favors U.S. West, Nynex, and Southwestern Bell, while Mr. McCabe thinks U.S. West and Pacific Telesis are the top regionalists.

Although major U.S. brokerage houses are actively judging the regional phone companies, it is difficult to evaluate their investment prospects since they have issued results for just one quarter. Nevertheless, analysts say each of the seven regionalists has performed well in the adapting to the new environment and in keeping down costs even as they split from their former parent.

Moreover, their businesses remain highly regulated by state governments. "The differences between the companies are not dramatic," Mr. Greenberg said.

Of the nation's other telephone companies, the prospects for those in a variety of fields like GTE Corp. and Continental Telecom are viewed as particularly bright. GTE through its Sprint long-distance service is third behind AT&T and MCI Communications Corp. in the \$45 billion long-distance business and is a manufacturer as well as being the nation's second-largest local telephone company.

"GTE is in a position to take advantage of the strong fundamentals of the telephone business," Mr. Greenberg said. "It is experiencing a cyclical recovery in manufacturing and in its electrical products business and is developing a series of new products." The analyst said that he expects GTE to earn about \$5.30 a share to \$5.40 a share this year, up from \$4.82 a share in 1983, and earnings of \$6.00 a share to \$6.10 a share in 1985.

Stock in MCI, once a Wall Street favorite, has dropped back sharply from a high last year of \$28.25 a share in over-the-counter trading to its current price in the range of \$9 a share. At current prices, Mr.

McCabe of Prudential-Bache said, he sees MCI as "intriguing" in the long run, while Steven Christ, who follows long distance and telephone equipment companies for Sanford C. Bernstein, is recommending MCI "very aggressively," predicting that the stock will be trading in the "mid-teens" next year.

Meanwhile, the market in telephone equipment, like switchboards and central office switching gear, is rapidly changing as the former AT&T local companies move from their historic dependence on AT&T's Western Electric Co. manufacturing arm to equipment from growing companies like Northern Telecom Ltd., the Canadian concern with stock on the New York Stock Exchange, to L.M. Ericsson, the Swedish company, traded on the NASDAQ market.

Frederick Ziegler, a Salomon Brothers analyst, said that he likes the prospects for several of those companies, like Ericsson, because of its strength in non-U.S. markets and calls the company the "clear leader technologically" in cellular mobile telephones, the new widely discussed mobile phone system just beginning to be mass marketed in the United States. Mr. Ziegler said that he expects Ericsson earnings to rise about 20 percent this year.



The Canadian telephone system is as modern as any in the world. Along its southern border, the telephone system is as sophisticated as it is in the United States. Canadian companies such as Northern Telecom and Mitel sell advanced switching and other telephone equipment in the American market.

The telephone system handles more than voice calls. There is also a national data network serving even the most remote communities and allowing them to tap into data banks and other computer services. "Canadian technology developed by Northern Telecom puts Canada in a clear lead when it comes to switching data, which is becoming a bigger user than voice of the basic telephone system," said Desmond Smith, a Toronto communications expert.

Still used as backup to the domestic satellites are 139 Microwave stations sprinkled across the country from Sydney, Nova Scotia, to Victoria, British Columbia, a distance of 3,350 miles. The system was built in the 1950s and, at the time, was the largest of its kind in the world.

The bulk of international calls made in Canada are to the United States and are over the same land, microwave and satellite lines used in both countries.

Transborder Data Flow is a big buzz word in the Department of Communications in Ottawa. The nationalists in that department see it as an evil thing, losing a bit of control over Canada's sovereignty. They worry about foreigners, that is Americans, being able to probe into the data banks and files of individuals, corporations and governments in Canada.

## Satellites Link Up Remote Canadian Areas

By Fred Langman

TORONTO — When the Canadian Broadcasting Corp. puts on the national news at 10 o'clock at night, it is instantly transmitted to Inuvik in the Arctic Ocean about 2,500 miles (4,000 kilometers) to the northwest, or to St. John's, Newfoundland, 1,000 miles to the east. Because Canada is so big — the second largest country in the world after the Soviet Union — telecommunications is vital to the country. As the railroads tied Canada together in the 19th century, telecommunications does so today.

As satellite "footprints" cover every square inch of Canada for both television and radio signals, the national television network, broadcasting off the Anik satellites, can reach Canadians in the remotest locations in the country with both English and French channels. Canadians also have acquired a

love for the satellite. Tavern owners across the country have bought satellite dishes so they can pull in sports events off Canadian and U.S. satellites and attract customers with games they cannot see at home. The federal government has tried to ban that practice, but, in the last year, it has given up. Apartment owners also are putting up dishes, offering free television service to tenants.

Remote communities are using satellite-receiving dishes to bring in U.S. programming and pay TV, for which they do not pay. Ottawa has been fighting a losing battle there as well.

The interest in satellites has built up a substantial industry in the country, from small manufacturers of backyard satellite dish systems, to a big company such as Spar Aerospace of Toronto, which builds the Canadian domestic satellites and supplies parts for satel-

lites for the U.S. National Aeronautics and Space Administration. Spar also built the arm used on the space shuttle.

Canada has five domestic satellites to serve the country's needs, from telephones and television to high speed transmission of computer data. The satellites are called Anik after an Eskimo word meaning brotherhood. "We are one of the largest satellite systems in the world and we are a technical leader," said Michael Bryen of Telesat Canada. Telesat is half-owned by the federal government, half-owned by telephone and telecommunications companies.

Telesat has sold its technology around the world. In early May, Telesat completed the installation of a satellite earth station in Zurich, supplied to the Swiss Post and Telecommunications Agency at a cost of Can.\$1.5 million.

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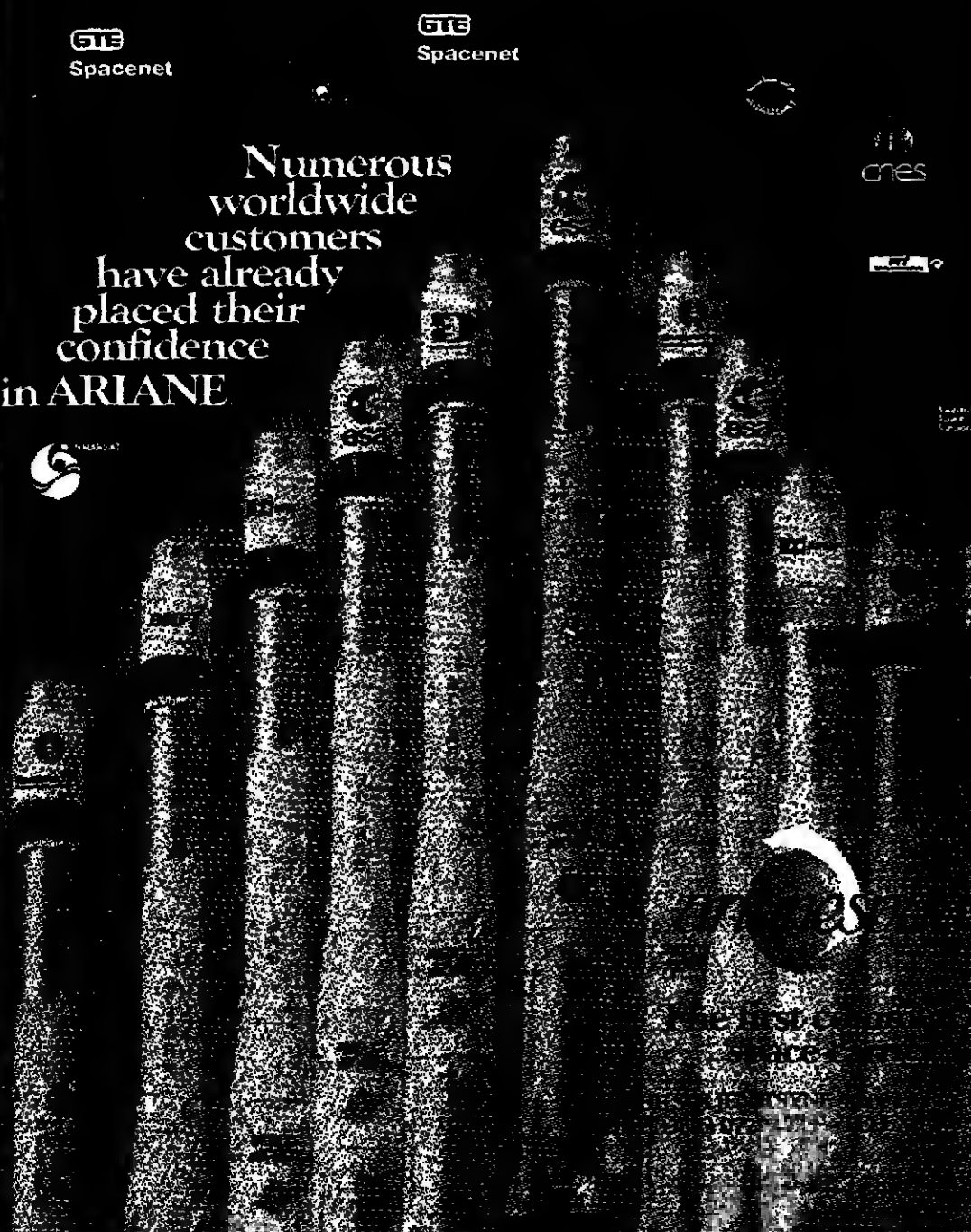
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## TELECOMMUNICATIONS

## Beepers Go Beyond Their Paging Role

By Larry Kahaner

WASHINGTON — Pagers have come a long way since that autumn day in 1950 when the first doctor was pulled off the golf course by a "beep-beep-beep" coming from his pocket. In fact, those in the industry are beginning to replace the name pocket beeper with the more futuristic sounding personal information device, because the latest units do more than just beep; they actually print out short messages. One day, they may even be able to receive messages anywhere in the world.

Pagers that beep — telling you to call your office — are still the bulk of the business, but they are being replaced by units that display a short message using words and numbers. They can "beep" to tell you that a message has been received or silently store it until you are ready to read. Still others remain quiet, coming to life with stored messages only at predetermined times convenient for you.

Some paging systems allow the same message to be broadcast to any number of selected users. Others can automatically send the latest quotes of selected stocks and even tell you if it hit a new high or low. Messages may be read as they come in or tagged by the caller with a priority alert for immediate response.

The choices are almost limitless, and some of the latest models are only slightly larger than a felt-tipped marking pen.

One of the most advanced pagers is the Motorola OPTX. It can store a single message of up to 80 characters and spaces in length. Up to four messages totaling 160 characters can be stored indefinitely.

Costs range from \$70 for beeper-only pagers to more than \$400 for the most sophisticated models. Service runs about \$20 a month, plus a small charge, usually 20 cents or so, for each incoming call.

Until recently, the growth of the paging industry has been modest, mainly because pagers only beeped. Also, the industry did not know how to sell to the mass market. That is all changing.

In 1970, there were only 50,000 pagers in the United States. In 1981, however, the market logged almost 1.75 million pagers and annual growth now is put at about 25 percent and rising. By 1990, there may be 7 million pagers in use, with revenues exceeding \$2 billion, said Telocator Network of America, a Washington group representing the paging industry.

The industry is becoming so lu-

crative that nonpaging companies are contemplating building paging businesses using their own transmitters. Starting soon, any FM broadcast station will be allowed to transmit paging signals on the "subcarrier" — a side channel of the main broadcast — but sometimes used for sending background music services such as "Musak."

In a similar deregulatory move, the U.S. Federal Communications Commission may unshackle TV broadcasters allowing them to use their subcarriers for paging. Right now, the main use of TV subcarriers is for sending teletext or bottom-of-the-screen text "crawls" for deaf viewers.

Most paging services have a 40- to 75-mile range because they use one powerful transmitter. However, national and even international paging systems are on the horizon and will use ingenious methods for extending their range.

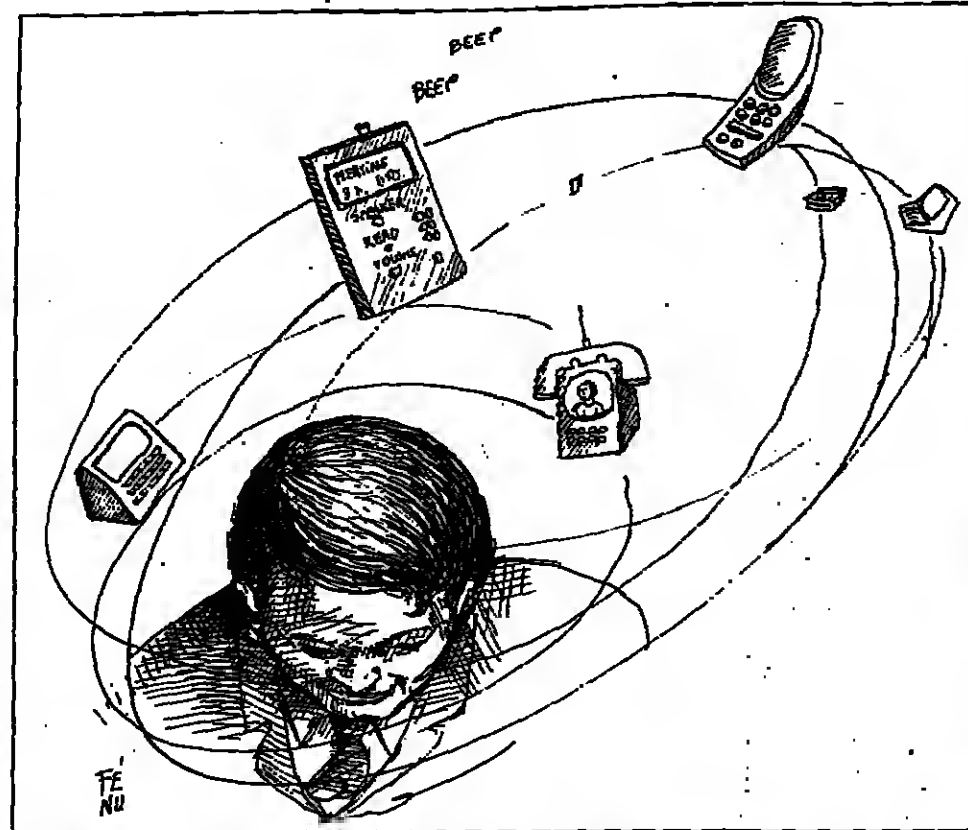
One common method of wide-area paging is by networking several Radio Communication Carriers (RCCs), companies that supply paging services, together. An incoming call is transmitted to the pager owner's home city and automatically sent to RCCs in other cities just in case he happens to be out of town. The connections are usually made by long-distance telephone lines and are being extended internationally.

PageAmerica Group Inc. of New York was the first to offer paging services between New York and London. Ultimately, the firm hopes to extend service to 50 other cities in Europe and Asia.

However, because many countries have not established wide-area paging services, the far-reaching telex network may be used. "Telex is a way of life in most of Europe and Asia," said David Post, chairman of PageAmerica. "It's used by everyone and goes almost everywhere."

The company hopes that within several years, European and Asian telex operators will connect their telex networks to RCCs, FM or TV stations for transmission. That would allow someone to receive a telex message over his pocket pager instead of an office-bound telex machine. The main hurdle is not technical but bureaucratic and it depends upon whether European and Asian telephone authorities will go for such a system. "We've seen some interest in pocket telex, but movement is slow," Mr. Post said.

By the year's end, PageAmerica and RCA Globecom hope to establish the first pocket telex system between the United States and London.



between the United States and London.

In the United States, the FCC has given the green light for three nationwide paging systems that could be prototypes for international paging without using telex.

In one proposed system, the phone number corresponding to a pager is instantly recognized as one with national (or international) receiving capability. The incoming call is relayed to a satellite network with downlinks in any number of participating cities. The received signal then is transmitted over RCC's transmitters to all pagers.

However, only the pager with the unique phone number called will respond.

More than a dozen groups have applied for the three channels that the FCC has made available by a

lottery. A consortium vying for one of the coveted licenses is composed of MCI Communications Corp., Metromedia, Inc., Communications Industries, Inc., and American Express Co. Another group consists of Mobile Communications Corp. of America, Western Union Paging Systems and National Public Radio.

Licenses could be granted by year's end, and construction could begin shortly thereafter.

Because of technical limitations, national or international paging systems will not permit voice transmission. Only digitally encoded messages to display-type pagers will be sent.

Paging is also moving into the two-way arena. IBM, for example, is developing a network that will allow pager-like devices to send and receive messages from a main

computer to units in the field. The system, which resembles a cellular mobile radio network, is being established to allow IBM field-service personnel to order parts and check data with a large mainframe computer while at a remote site. Once the system is in place, it could be expanded to let consumers use their pagers to communicate among themselves. The prototype units are about the size of a thin paperback book, have small display screens and full, but miniature, typewriter keyboards.

Most pager users, though, do not need two-way capability. However, as the cost of paging drops, it may one day be cheaper to carry around a small communications device capable of sending and receiving messages than it cost to send that first message to the doctor on the golf course.

## Economic Potential of DBS Getting a Close Second Look

LONDON — All over the world, broadcasters are preparing for the era of direct-to-home satellite television broadcasting. The United States, Britain, France and Germany are building direct broadcasting satellites (DBS). Other countries are not far behind.

But while the technology of the DBS is exotic, the economic prospects for the new broadcasting technique look decidedly dubious, at least for several years. The projects are risky, and collectively they require billions of dollars of investment. A growing legion of skeptics believe that DBS, far from being an opportunity to make money, may instead, turn out to be a financial catastrophe.

Examined on its technical merits, DBS would seem to be the perfect method to distribute television. Just one satellite can, in theory, take the place of the hundreds or thousands of far-flung transmitting towers needed to distribute existing national networks. In countries like the United States, DBS could eventually allow the three national networks, ABC, CBS and NBC to bypass their affiliated stations, with which they currently share their advertising profits, and provide programs directly to viewers. In Europe, where there is little cable television, DBS offers the possibility of rapid introduction of new video services, such as television.

And in developing countries, where there is almost no television service outside the major cities, DBS seems to offer the chance to provide the first national television service of any kind. That is why

countries like Egypt are establishing DBS task forces to draw up specifications as a first step to purchasing DBS systems.

So if it sounds so promising, why the skepticism? Here are some of the reasons why DBS may not get off to a smooth start and why in some countries it may not be developed for years.

Although it is technically not difficult to build and launch a DBS spacecraft, the production of the necessary earth-receiving dishes will require an entirely new, mass-production industry. Today, such mass-production facilities do not exist. And while they can certainly be built, in time, there is a chicken-and-egg dilemma. Without the receiving dishes, the satellites will not be able to find an audience; without the receiving equipment, the incentive to invest in the satellites is lacking.

DBS spacecraft are expensive — about \$100 million each. A typical system will require three of them: one to serve as the operational satellite, a second to be positioned in space as a spare satellite, and a third, on the ground, ready to become a spare if the primary satellite fails in orbit. Adding the price of the rockets required to put the satellites in the sky, insurance premiums and the equipment to transmit the signals to the satellite, the total investment required is about \$300 million. It is a price that is beyond the reach of many developed countries, and far too steep for many of the developing countries that need the systems the most.

DBS will face stiff competition. In many countries, this will take the form of existing or planned cable-television services, which offer the possibility of two-way communication to homes versus the essentially one-way delivery provided by DBS. DBS also must overcome the worldwide boom in video-cassette recorders (VCRs). Penetration of VCRs in the United States is expected to exceed 20 percent of the population by early 1985. In much of Europe, the penetration already is higher. When consumers can rent films for a few dollars a night, they may not see much benefit in making the \$300-\$500 investment required for a DBS antenna.

DBS may even be technically obsolescent. When the original plans for DBS were drawn up in the late 1970s, it was envisioned that the satellites would need extremely high-powered transmitters in order to broadcast into receiving dishes small enough (2 feet, or 60 centimeters, in diameter) to be inexpensive. But advances in electronics have opened the possibility of transmitting television directly to homes from conventional, low-powered satellites.

From the point of view of those who must invest in the satellite system itself, the low-powered option is attractive, because such satellites also can be used for transmission of telephone conversations, videoconferences and computer data. In the United States, such a low-power DBS service, operated by United Satellite Communications Inc. (USCI), already has started. USCI

## EUTELSAT Is in Space Race With Eye on Quality, Price

By Michael Metcalfe

PARIS — EUTELSAT moved into the space race on June 16 last year with the launching of its first satellite aboard the European Space Agency's Ariane rocket. EUTELSAT is Europe's answer to the spiraling increase in demand for international telecommunications traffic.

If the Arab countries are served by the ARABSAT system; if South America and Africa are planning their regional systems; if Intersputnik serves the East European bloc nations; and if the United States and Canada have their common systems; then EUTELSAT was created to fill regional needs in Western Europe.

Formed in 1977 under the aegis of the European Posts and Telecommunications Conference by 17 European public telecommunications administrations, EUTELSAT now has 23 members.

The competition for space and international telecommunications traffic is fierce. Aware of astronomical profits and the prospect of carving out a market in international communications via commercial satellites, other organizations are muscling in on the orbital space above the earth.

The satellite telecommunications market is estimated to run into the several billions of U.S. dollars in the coming years, with the market so far controlled by U.S. industries.

The biggest international satellite telecommunications organization, and EUTELSAT's primary competitor, is INTELSAT. Based in Washington, it has, through its U.S.-built satellites, created a monopoly for itself in the international satellite communications sector.

With headquarters in a skyscraper glass tower dominating the Paris quarter of Montparnasse, EUTELSAT, acting on behalf of Europe, is anxious to carve out its share of the satellite telecommunications market.

Andrea Caruso, EUTELSAT's secretary-general, is the first to admit that general obstacles stand in the way of the establishment of the organization.

"It was not easy, for instance, to put together the European PTT administrations to make them agree that there was a need for satellite telecommunications in Europe," Mr. Caruso said.

The relatively limited dimensions of the continent, the availability of an already well-developed land-based network, the costs involved in the creation of operational telecommunications satellites and their related ground equipment — the so-called space and earth segments — all made the going difficult.

But, Mr. Caruso added, there was another serious obstacle in the form of the economic coordination of the EUTELSAT system with INTELSAT, in accordance with an old provision of the INTELSAT agreement stating that separate international satellite systems should not compete with the INTELSAT system in such a way as to cause the latter economic harm.

"This provision, which was justified at the beginning of the satellite communication era and had been dictated by the need of helping and supporting the establishment of the main global system, nowadays has become obsolete and even absurd in many respects," Mr. Caruso said.

Mr. Caruso does not like the word "monopoly," using the argument that the satellite telecommunications business of today is much too large and expanding to warrant the word.

"... If the objective of the American and non-American supporters of the old provisions of the INTELSAT agreement, thus of the monopoly of INTELSAT, is that of obstructing the way to the space industry of other parts of the world and of Europe in particular, the only answer to such an absurd attitude is that the governing rule of the game today is and must remain that of the quality and the price of the product," the secretary-general said.

And EUTELSAT is intent on pursuing that aim. On Nov. 14, 1983, EUTELSAT and the European Space Agency signed an agreement geared to giving EUTELSAT greater flexibility in the operation of its space segment relating to the establishment and maintenance of the European Communications Satellite (ECS) series. This agreement, in particular, now makes it possible for EUTELSAT to operate with a three-satellite configuration if required.

In tandem with this, an agreement was signed between the European Space Agency and Ariane Space, reserving Ariane flight 121 for the launch of the third communications satellite EUTELSAT 1-F3 with a launch date set between Aug. 1 and Sept. 30, 1985. The first satellite, EUTELSAT 1-F1, which was launched last June, commenced operations on Oct. 12, 1983, and a second was set for May 1984.

At its last meeting in Paris in January this year, the EUTELSAT ECS Council was able to note the operational status of the first satellite, and the establishment of the ground network.

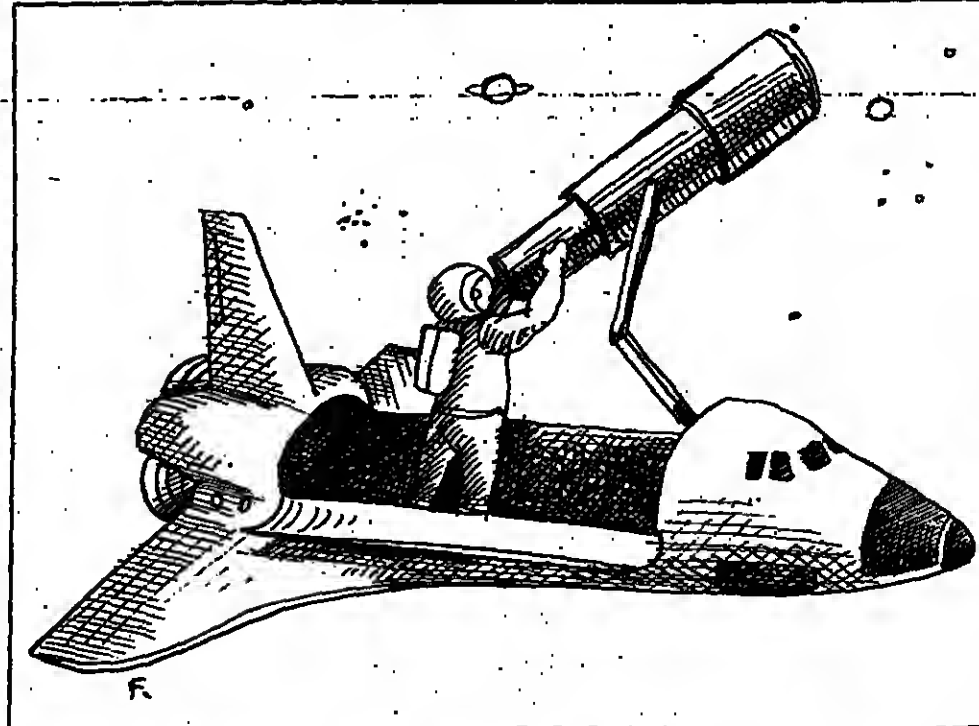
Since the satellite entered commercial service last October, three of the 10 transponders available for full-time lease have been put into service by France, West Germany and Britain, and there have been several hundred hours of occasional use for experimental or operational analog or digital TV transmissions.

"In all, nine leases have already been signed covering five transponders for international use and four transponders for domestic use [notably the Federal Republic of Germany]," EUTELSAT reports.

The system makes extensive use of cable television networks, with one of the regular TV transmissions broadcasting five hours of programs a day to cable TV networks in France, West Germany, Austria, Switzerland, Norway and Finland — all EUTELSAT members.

EUTELSAT lists as four of its prime objectives the channeling of a significant portion of intra-European public telephone traffic; the transmission of TV programs within the Eurovision framework; the provision of multiservice transmissions geared to the business community, and the provision of space-segment capacity on a leased basis for various applications, including cable TV feeds.

"A major challenge for the future years will be that of institutional cooperation among satellite systems and, in the era of space platforms, in the next decade perhaps, we will see in Europe an even greater incentive for consolidation of planning and sharing of large multipurpose-use satellite facilities, hopefully under the aegis of EUTELSAT," Mr. Caruso said.



has been unable to keep up with the demand for receiving equipment, and is seeking new capital.

With such technical and economic doubts clouding the future of DBS, the industry would seem to have enough obstacles to overcome. Unfortunately for the proponents of DBS, these problems may,

in many cases, be dwarfed by the political hurdles.

Given the insatiable demand of consumers for television programs, some kind of satellite broadcasting seems as though it will eventually succeed. The question is one of timing. For countries like France, which sees DBS as a way of stimu-

lating its space industry, the wait may be worthwhile. But in the United States and Britain, where DBS is supposed to pay for itself and eventually produce profits, this newest of the television distribution technologies may prove to be a disappointment.

— JONATHAN MILLER

## A Major Financier in France

CNT

CAISSE NATIONALE DES TÉLÉCOMMUNICATIONS

Finances French Telecommunications

The Caisse Nationale des Télécommunications, CNT, is a national agency of the Republic of France.

The purpose of the CNT is to make available to the budget of the PTT funds needed to pursue further investments in telecommunications.

The CNT both issues loans and invests in companies whose exclusive purpose is financing of Telecommunications.

The CNT is currently active in the major domestic and international financial markets for public bond issues and syndicated and non-syndicated bank loans. Throughout the year, the CNT issued commercial paper on the United States market.

The CNT has played an essential role in the investments of the Telecommunications branch of the French P.T.T. since 1974.

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## The Expanding Use of Space

(Continued from Page 7)

congestion in the orbit is in that portion of the arc most suitable for serving North America. The management of this portion, they say, is not an international problem, but a regional one, and can be solved by means of consultations with Canada, Mexico and, if necessary, countries in the Caribbean.

A final complication for the negotiators at the WARC is the mounting uncertainty about the real importance of satellites in the years ahead. While U.S. and international satellite services have in the last decade showed astonishing growth, in recent months there have been indications that the rate of growth is tapering off. Partly this is due to improvements in earth station equipment that make it possible to increase the amount of information transmitted over existing satellites.

But to a growing extent the bloom is off the rose because of the rapid improvements in the technology of fiber-optic transmission, which uses laser beams to transmit information along hair-thin strands of glass.

The competition to satellites from such improved terrestrial transmission systems might eventually mean that satellites will mostly be used for television program distribution, with their use for telephone traffic restricted to "thin" routes, those linking small, isolated communities with major business centers. It is perhaps significant that American Telephone

& Telegraph, which built the Telstar satellite in 1962, is in the forefront of those organizations now growing cool on satellites. According to Ian Ross, the president of Bell Labs, AT&T's internationally respected research and development unit, fiber-optic transmission is improving much faster than satellite techniques and is likely to continue to outpace satellite technology in the years ahead. AT&T believes few additional satellites will be needed as new techniques on the ground allow existing satellites to transmit even more information. AT&T recently introduced a new system that increases fourfold the number of telephone calls that can be carried on a single satellite.

One factor gives some people confidence that the space allocation conference may actually succeed in developing a plan that satisfies almost everybody. This factor is the introduction into ITU of the computer.

The office of the U.S. delegation to the communications conference in Geneva has a high-speed data communications link with Washington. Technicians at consoles in Switzerland have access to a vast data base and the ability to feed into the system various hypotheses about how the arc might be organized. When everything works, computer simulations can be generated for any proposed use of radio spectrum and orbit. Regulatory scenarios can be quickly put to the test.

With the help of the printouts, the ITU-sponsored conference on the use of the high-frequency band, an arcane but once controversial subject in ITU circles, went off earlier this year in Geneva with very little animosity. So did the 1983 conference between American nations on broadcasting satellites.

But the real question may be, will all the computers come up with the same answer? The ITU now has a computer of its own turning out simulations. Other countries can be expected to show up in Geneva with their computers.

Ambassador Abbot Washburn, the former FCC commissioner who led the U.S. delegation to the 1984 satellite television conference, said he believes the introduction of the specialized computer program to be the important new element in ITU affairs. What is not clear is whether it will help speed negotiations to an amicable conclusion, or produce even more confusion.

The betting in Washington is that the 1985 WARC conference will not in itself be a disastrous setback for the Americans. The decisions to be taken at the WARC will take years to implement and will be reviewed again at another WARC planned to be held in 1988. By then, the United States will probably be forced to live by some new rules. But if the computers are right, it will not matter. The new super-satellites on today's drawing boards will always find a home in space.

## The Mushrooming Vocabulary

By Al Senia

LOS ANGELES — As with most other contemporary problems, it probably began with television. That invention — and the word that defined it — seemed innocuous enough when it emerged in the 1950s.

Television, we learned, was simply the transmission of scenes or moving pictures by the conversion of light rays into electrical waves, which then are reconverted to reproduce the original image. It was a simple beginning that spawned a history of technological advancement. As television has become ubiquitous in Western societies, so, too, has its influence spread into language. A variety of devices, inventions, industries and the resultant words and phrases followed from television. And that has sent the latter-day linguist reeling in an attempt to classify the new words and precisely identify their meanings and origins.

Telediction. It began with the lowly teletype, telephone and telegram, eagerly embraced television and went on to new heights. And now we have an onslaught of such telewords as, teleshopping, teleconferencing, telebanking and tele-

The end is not in sight. The rise of the home computer in the United States, for example, has led to telemail. Just two weeks ago, the Wall Street Journal grandly dubbed the Rev. Robert H. Schuller, a popular, California minister, a "televangelist." His weekly church service is broadcast over the airwaves.

You do not need to be telephatic to know such telewords (derived from the Greek prefix tele, meaning "at a distance") have entered the lexicon of popular American usage. Some language purists, as well as other wordsmiths who are natural television-haters, have denounced the trend as potentially troublesome. The effect is not unlike that of concerned French citizens watching in frustra-

tion as a barrage of Americanisms like hamburger, blue jeans and rock'n'roll have entered their language over the years, filling gaps in language brought about by a spiraling technology. As telewords poised for the next trans-Atlantic assault?

Linguists believe so, but they do not necessarily see a sinister trend. "We don't feel, in general, that a language is either improved or diminished by the addition of words," said Robert T. Stockwell, a professor of linguistics and chairman of the department at the University of California at Los Angeles.

Such words fill the gaps created in a changing language. Professor Stockwell believes, and so actually perform a worthy service. "It's just sort of normal language behavior," he said. "To talk about improvement or diminishment is sort of meaningless. If you get a new word like telecommunications — well, why not?"

In the spirit of such adventure, we offer a guide to the most commonly used telewords in U.S. business circles:

- Teleshopping — using a personal computer or a computerized access card to automatically check account balances or to transfer funds without the intervention of a human bank teller.
- Teleconferencing — hosting a group meeting that ties together far-flung offices through such devices as a telephone and/or a satellite.
- Teleshopping — using a video screen, usually attached to a home computer, to do one's shopping for groceries, general merchandise and, more recently, airplane tickets.
- Teletext — interactive information services delivered in a one-way fashion over broadcast television signals or cable channels.
- Videotex — interactive information and transactional services usually taking place over telephone lines.



## TELECOMMUNICATIONS

## Cellular Technology Transforms Car Radio Field

WASHINGTON — Cellular mobile radio, a technology that promises to revolutionize the telephone industry, has finally come of age in the United States. Although the system that allows calling from your car has been operating in Scandinavia, Japan and a few other countries for several years, the United States, the world's largest potential market, is just beginning to establish this service.

The stakes are enormous. The most conservative experts predict that the U.S. cellular business will serve more than 3 million customers by 1990. And yearly revenues for service and equipment are expected to top \$2.5 billion by the end of the decade. Right now, American Telephone and Telegraph Co. estimates an immediate pent-up demand for mobile phone service at 500,000 people.

They cannot get service on present-day mobile phone systems because of the lack of channels. In New York, for example, 700 customers share 12 channels. That means only 12 conversations can take place simultaneously, and during rush-hour traffic dial tones are virtually impossible to obtain. Many mobile phone companies no longer accept new clients.

The traditional car phone system was doomed to failure. Each city has one or two high-powered transmitters to communicate with car telephones in a 30- to 50-mile radius. To make a call, users must find a vacant channel then call the operator and supply the phone number. In some cases, users may dial the

number themselves, but even these systems suffer from there being too few channels and long waits. To call someone in a car, the caller must know which city the car is in, then call the mobile operator and have him place the call.

Now, enter cellular technology. Instead of just one large transmitter for each metropolitan area, cellular systems divide an area into "cells," each with its own low-powered transmitter and receiver. A cell is capable of handling more than 300 callers at once. As the number of users grows the cells are divided into still smaller cells until growth is accommodated. With low-powered transmitters, the same channels may be used simultaneously in non-adjacent cells.

As a car crosses from one cell to the next, the cell transmitter and receiver sense that the car phone's signal is fading and transfers the call to the new cell. The connection is instantaneous and without interruption. All cells are wired into one computer that handles the routing.

Calling from a car is as easy as making an ordinary phone call. The unit automatically locks in on an empty channel as soon as a number is dialed.

Calling a car is just like dialing any land-based phone because each cellular mobile unit has its own phone number. The cellular computer system continuously interrogates all phones in its area so it knows their locations if a call is received.

Even traveling outside of your home city is no problem. A local

cellular system recognizes that it has a foreign telephone in its area and immediately notifies the home base of its location so incoming calls can be quickly relayed.

Cellular mobile service has been a success everywhere it has been established. In Sweden, Norway, Denmark and Finland, service began in late 1981 and grew to 100,000 customers almost overnight. Japan's nine metropolitan systems boast more than 20,000 users, and Mexico City has almost 1,500 subscribers.

Although any remaining technical problems are certain to iron themselves out, the main factors stalling the industry are regulatory and financial. The Federal Communications Commission studied the matter for almost 12 years before setting guidelines. "This matter has been under consideration longer than any new service in FCC history," said the chairman, Mark S. Fowler, when the agency finally gave the go-ahead in 1982. "The U.S. can join the rest of the world," he said. Still, regulatory hearings are delaying construction in many markets.

But the major drawback to rapid growth is high price. In addition to the hefty average rate of about 40 cents for the first minute and about five cents for each additional minute, customers pay a service fee of between \$25-\$50 a month. Although some customers rent the phones for about \$25-\$30 monthly, the sets cost about \$2,000. Once the market matures, however, the price for equipment and service will drop

considerably. Monthly bills are running at about \$150, including rental fees. "Celling" a major city could cost \$20-\$50 million, and unless payback is swift, companies may have trouble covering their expenses.

There will be two licensees in each metropolitan area. Experimental systems that have gone operational are in the Washington/Baltimore metropolitan area and Chicago. Franchising procedures have just closed in the lucrative top 20 markets, and the remainder of the markets are headed for closure. The top 90 markets could be "celled" within two years.

In just four months of operation, Chicago subscribers to one of two expected systems in that city topped 5,000, and in the Washington/Baltimore area, again with only one of the two expected systems operating, more than 2,000 people have signed on within the last four months.

One of the biggest surprises is the demand for handheld telephones. Despite their weight — more than 30 ounces (872 grams) — these units are taking a strong share of the market. As much as 60 to 70 percent of the Washington/Baltimore system is expected to be composed of portables.

In Chicago, the demand for portables is high too, especially among business commuters who use public transportation.

The main stumbling block in growth is not cellular technology but battery technology. Batteries

deliver little power for their weight. But with rechargeable-battery technology advancing slowly, a portable phone weighing less than a pound is possible.

A portable could become a person's only phone. It travels when necessary or stays on a desk as the regular room phone. Cellular technology could replace wired buildings and homes.

As the price dwindles, it could mean the end of local phone companies, which were the only source for the so-called "local loop."

New communities may decide not to wire their cities in the usual way but instead choose a cellular system — no wires at all. Indeed, in rural areas, the costs of wiring a sparsely populated town is high, and wires on poles are unsightly.

Sharp entrepreneurs already are eyeing cellular pay-phone booths, which can be trucked into short-term events such as concerts or fairs.

There will be no need to wire temporary phones for attendees. Companies may also scrap their traditional two-way radios for cellular phones.

Instead of a dispatcher calling a delivery truck driver over the radio, the truck could be equipped with a cellular phone. The driver could not only call the dispatcher if necessary but also call the customer for directions or changes in his schedule without bothering the dispatcher or stopping to find a phone booth.

— LARRY KAHANER

## Keeping the Codes Secret

(Continued from Page 7)

magnetic pulses, are inherently ephemeral and invisible. There are no sealed envelopes nor handwritten signatures to assure the authenticity and secrecy of transactions. Encryption could help solve these problems of protection and privacy. Modern cryptographers employ complex ciphers, often derived from the most arcane reaches of mathematical theory, to protect data. A cipher is a series of operations used to translate any text or data into a cryptogram. The cryptogram, hopefully, will be comprehensible in only those who know its key. A code, unlike a cipher, is a set of equivalences for a predetermined set of words or phrases. It usually implies the use of a code book and is, therefore, less practical, secure and supple than a cipher.

The encryption of information can help protect against fraud, as in the case of electronic funds transfer, and against the infringement of personal privacy. People are increasingly using home computers or terminals, in conjunction with the public telephone network, to do their banking, shopping and information gathering. Cable brings a wide variety of TV programming into many homes. This communications infrastructure, if left unprotected, could be tapped surreptitiously to create profiles of an individual's personal habits and preferences. Such profiles might be exploited for commercial or political ends.

But for economic, political and practical reasons, encryption techniques are seldom employed. "Security is expensive and it's inconvenient," said Mr. Ganley. "All kinds of special procedures have to be instituted." The whole interest of data communications is that it is a cost-effective technique. Every time you add something to it you increase your transportation cost. And governments are not always eager to see effective security techniques implemented on communications networks. "Most governments in the world don't like you to encrypt," asserted Mr. Ganley. "They prefer to read your mail."

In the United States, cryptographers and the National Security Agency, the country's leading code-breaker, have been engaged for several years in an on-going tug-of-war. The national security prerogatives of the government and the right of cryptographers to freely publish their work are not always easily reconciled. The NSA, whose mission it is to monitor national and international communications for the Department of Defense, is clearly concerned that the development and widespread implementation of encryption techniques might hamper it from carrying out its assigned function.

But perhaps the most important explanation for the present lack of initiative in implementing encryption techniques on communications networks is the public's lack of sensitivity to the need for such security. "The thing that is developing slowly is awareness," stated Mr. Simmons at Sandia. "The fact that one has found a solution is not enough to compel the person who must make a decision to invest in it. . . . Solutions get implemented when the problem can't be ignored. Before adequate protection plans are implemented there will be some serious misuse of private information. That will be the driving force."

Many experts express confidence that private individuals and businesses will insist on the use of encryption techniques as electronic networks become more widespread. "I am quite optimistic that this technology will be widely used," said Ron Rivest, a professor of computer sciences at the Massachusetts Institute of Technology. "Security is a quality of a communications channel that is very natural to want."

"As we move into the information age, people are going to become more concerned about personal privacy," predicted David Chaum, a mathematician at the University of California in Santa Barbara. But for the moment there is still a dangerous lag, the experts said. "I think that there is an increasing consciousness," said Mr. Ganley at Harvard. "But it is probably not increasing as fast as the [communications] technologies are being implemented."

## U.S. Regulatory Agency Urges Uniformity in International Standards

By Stephen J. Shaw

WASHINGTON — The Federal Communications Commission, the licensing agency responsible for regulating U.S. communications, is entering the export business.

The agency, a reigning champion of a deregulated telecommunications industry, is promoting its vision of a laissez-faire marketplace for advanced information networks. Its efforts are meeting resistance from international telecommunications agencies and Post, Telegraph and Telephone (PTT) administrations that traditionally exert direct control over the evolution of communication networks.

The two philosophies are colliding over the development of international standards for Integrated Services Digital Networks (ISDNs). These advanced communication systems use on-off electrical

pulses to transmit information rather than conventional analog techniques that vary the strength of the electrical signal. Because of the all-digital nature of the transmission, any form of communications — voice, video and data — can be bundled into a single transmission stream.

An unprecedented degree of intelligence can be incorporated into an ISDN and allow the transmitted information to be manipulated in a variety of ways. Existing versions of ISDNs, for example, include digital private-branch exchanges and local area computer networks that provide such communications services as store-and-forward voice messaging, permanent telephone extensions and high-speed data transmission. As envisioned by some, a worldwide ISDN would allow users in any country to inter-

connect any type of electronic communication device with any form of information service.

The International Telegraph and Telephone Consultative Committee, an agency of the International Telecommunications Union (ITU), has drafted a proposed set of ISDN

technical standards for consideration at the November plenary session of the ITU. In keeping with the pro-regulatory attitude of the vast majority of committee members, the committee recommended standards incorporate stringent controls over transmission protocol, network architecture and termination equipment.

In contrast, the FCC would like to see ISDN technical standards kept to a minimum in the final draft of network standards to be considered by the ITU. Technical standards, according to the FCC argument, are best derived from the marketplace.

The commission opened an inquiry late last year to gather comments from ISDN industry on the proposed ISDN standards. In April, the FCC issued its first report on the subject. The report

bluntly stated that international ISDN standards should be in accord with basic FCC guidelines governing the domestic telecommunications industry.

"Our Computer II rules and policies are established, and properly should be accommodated in the ISDN planning efforts," the report stated.

The first technical concern is over draft recommendations by the consultative committee that restrict the type of equipment used to interface with the network. Reflecting the nationalized nature of communications carriers in ITU countries, the committee's plan calls for the provision of network termination equipment by the carrier. In the United States, this interface equipment is offered by a variety of vendors, a result of the Computer II decision. The report

"Our viewpoint is that the network interface box can still be a carrier function, but not a carrier monopoly," said Michael Slomim, FCC legal adviser.

The FCC is also concerned that the proposed ISDN standards will restrict the entry of U.S. network service providers into foreign networks by specifying a network numbering system that could not accommodate the increasing number of U.S. vendors. Foreign governments and their telecommunications agencies must recognize the importance of allocating adequate numbering codes to satisfy a variety of vendors, the FCC report stated.

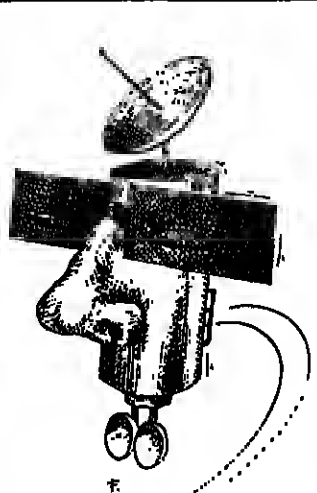
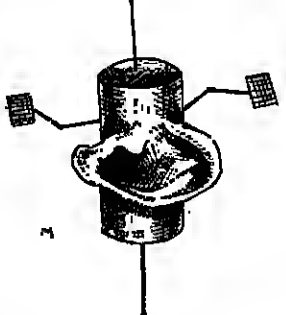
"If it is assumed that a single service provider will be providing service in a given country, it is reasonable to arrive at a message-routing numbering framework that

does not have the capability of addressing multiple providers of service."

On the policy side, the FCC is strongly urging that its distinction between "basic" and "enhanced" information services be incorporated into the international communications framework. A basic service is considered by the commission as one that does not alter the format, protocol or code of the transmitted information, and is regulated in the U.S. model.

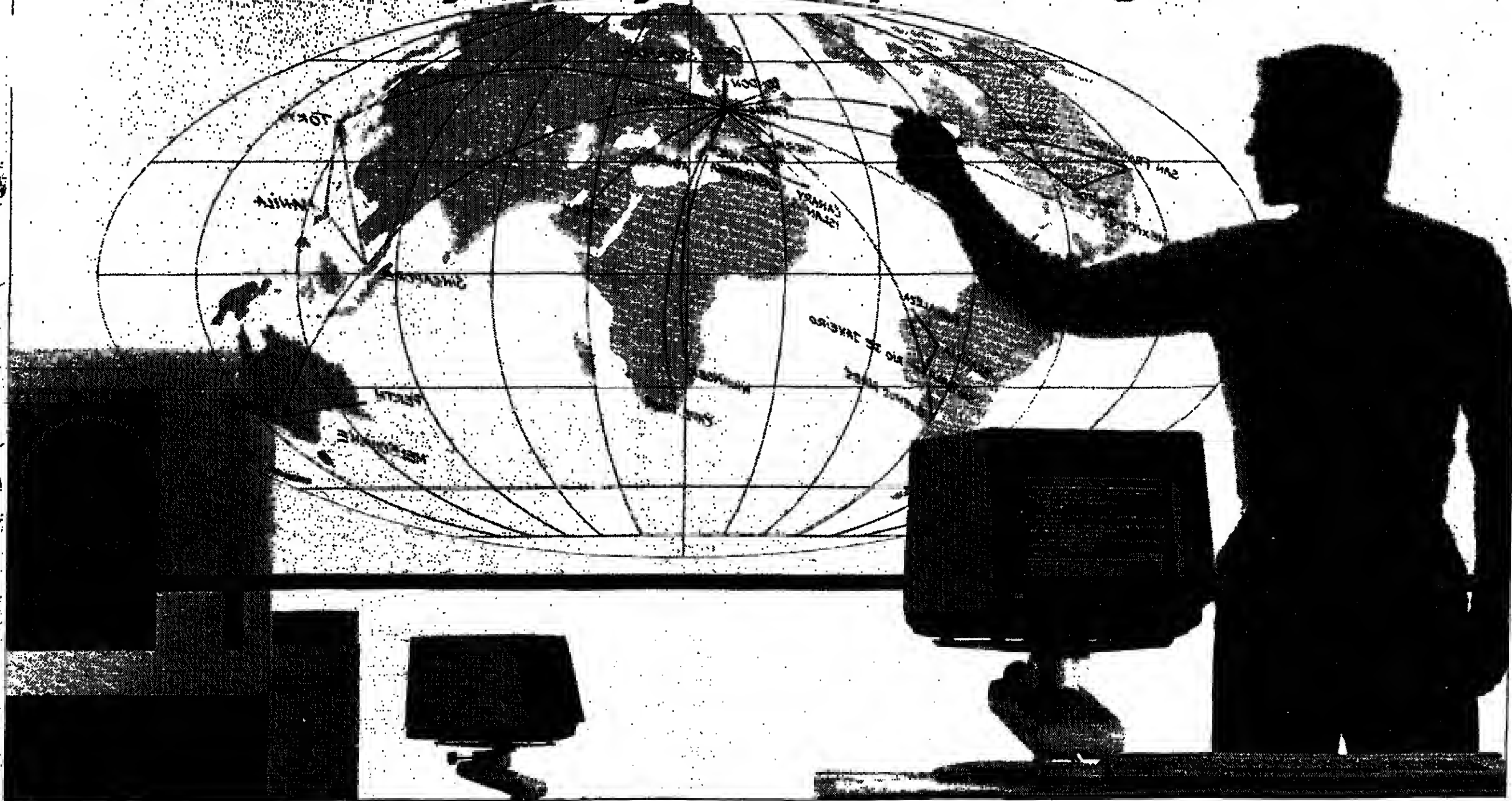
An enhanced service, which is not regulated, is defined as one that employs computer processing applications that add value, such as packet data switching, to the transmission's content.

Recommendations by the consultative committee draw a distinction between bearer and telecommunication services that roughly approximates



the FCC's basic and enhanced service categories. However, these service types are commingled in most national telecommunications networks, a situation the FCC clearly finds anti-competitive but is willing to tolerate.

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## TELECOMMUNICATIONS

## U.S. Military Developing Satellite Communications System

By Paul Kinnucan

BOSTON — Concerned about assuring control of its far-flung forces in the event of war, the U.S. Department of Defense has begun development of a satellite-based communications network designed to survive enemy attack.

Scheduled to become operational by the end of the decade, the new system, called Milstar, is expected to serve as the backbone of America's communications, command and control network through the end of the century. More importantly, in the event of war, it will guarantee, according to the Pentagon, the ability of the U.S. High Command to communicate with forces anywhere on the face of the globe, whether on land, in the air or at sea.

To assure survivability, Milstar satellites will operate independently of fixed ground stations, automatically maintaining their positions in space and routing messages

among as many as 4,000 terminals based on ships, aircraft and trucks. Crosslinks among the satellites will enable them to relay messages above the atmosphere, eliminating dependence on ground stations for relaying messages.

Because of the use of autonomous satellites, it will be impossible to put Milstar out of commission by destroying ground stations, the Pentagon said. The small size and mobility of the ground terminals will make them difficult to find and destroy.

As a further measure of protection, the Milstar satellites will operate in the extremely high frequency (EHF) band, which comprises frequencies greater than 30 gigahertz, or billions of cycles a second. For example, the satellites will receive messages from ground stations at 44 gigahertz. This will allow the use of small antennas on terminals and will make generating sufficient power for jamming difficult. (The output of transmitters based on

current technology drops drastically at such frequencies.)

Similarly, the satellite crosslinks will operate at 60 gigahertz — a frequency at which the atmosphere is opaque to radio signals. This will enable Milstar to use the atmosphere to shield sensitive messages from would-be eavesdroppers at ground-based listening posts. To elude would-be jammers, the Milstar satellites will switch frequencies at a high rate over an extremely broad swath of the frequency spectrum.

The Milstar system will comprise seven satellites. Four geostationary satellites will provide coverage for all of the earth except the poles, which will be covered by three satellites operating in polar orbits.

Milstar will rely extensively on advanced technology. For example, the system will use powerful microcomputers and other ultra-advanced microcircuits to allow the intelligence required for automated operation to be fitted into a satel-

lite capable of being launched by a space shuttle.

To enable operation at extremely high frequencies, the system's receivers — and perhaps its transmitters — will use ultraviolet circuits based on gallium-arsenide crystals.

The first of the seven Milstar satellites is slated to be launched in the late 1980s. It is being developed by a team of aerospace companies headed by Lockheed Corp. under a \$1.049-billion contract awarded by the Pentagon last summer.

Contracts for ground terminals, estimated to cost as much as \$41.4 million each, are scheduled to be issued next year by the army, navy and air force. The total cost of the system may run as high as \$10 billion, according to some estimates, which would make it the most expensive electronics project yet undertaken by the Pentagon.

The Department of Defense already operates three communications satellite systems and also uses

civilian satellite systems and land and undersea cables.

However, the Pentagon claims that it needs Milstar because its existing systems are vulnerable to attack. For example, present systems depend on a few, large fixed ground stations for most command and control functions. The satellites themselves are merely relay stations in space. If the ground stations become inoperational, either accidentally or as a result of enemy action, the entire system becomes unusable.

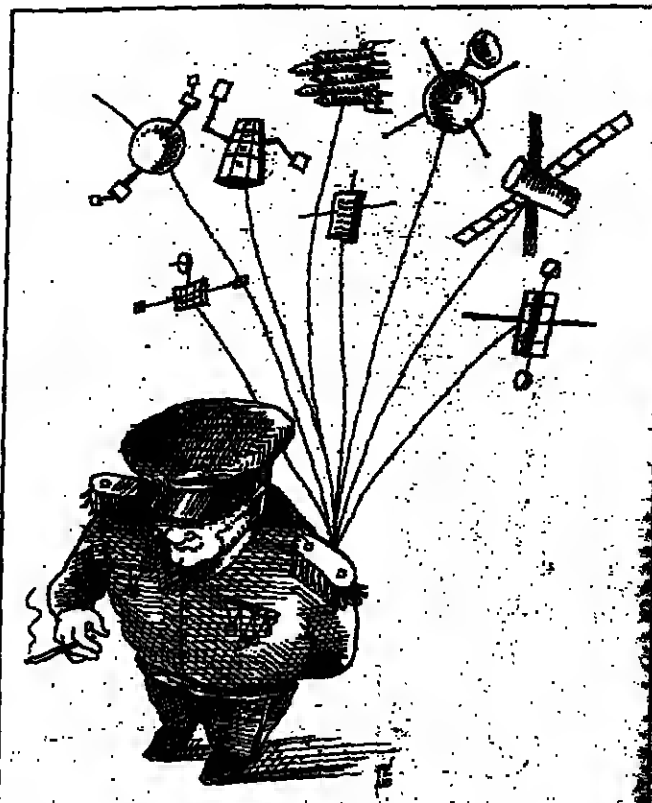
The existing systems are also incompatible, making interservice communications difficult or impossible. Moreover, existing systems are vulnerable to sophisticated jamming techniques.

In the past, the Pentagon was not overly worried about the vulnerability of its satellite communications systems because of its belief that any major war would be short and catastrophic. Now, however, the Pentagon believes that the de-

velopment of highly accurate missiles and limited-blast nuclear bombs (neutron bombs) increases the chances that a war with the Soviet Union will be protracted. In such a war, satellite communications systems would become targets of attack. Hence, the need for Milstar.

Not everyone agrees that Milstar is necessary, however. Critics say that it is foolish to believe that any major conflict would be of long duration. In fact, critics say, Milstar could increase the chances of war by bolstering the confidence of U.S. leaders in their ability to fight a protracted war.

Moreover, they say, antisatellite weapons, such as those now being developed by the United States and the Soviet Union, will make the system obsolete before it is completed. By the time Milstar is ready for operation, critics suggest, the Soviet Union will be able to attack the satellites themselves and hence render Milstar inoperable.



## China Speeding Up Modernization

By Joel Solkoff

WASHINGTON — China has about 2 million telephones and more than 1 billion people. Eighty percent of the Chinese people live in rural areas, but most of the telephones are in the big cities and most Chinese have probably never seen a telephone. And there is outright hostility to the telephone.

Despite China's modernization efforts, that hostility persists. Last year, China's Ministry of Posts and Telecommunications (MPT) warned that the practice of "dismantling telephone facilities in rural areas" must stop. This year, a correspondent writing in the official Chinese-language People's Daily complained about the "failure to appreciate the importance of telecommunications facilities," noting that "most people in China tend to give other services priority over communications and some even regard telephones as 'luxury decorations'."

Hostility toward the telephone and other modern instruments manifested itself during the Cultural Revolution (1966-1976) when the first minister of posts and telecommunication was purged. For a while, the ministry itself was abolished. This had a dampening effect on the provision of telephone service, and the MPT admits that it has not yet recovered from "the 10

years of turmoil," when only 40,000 telephones a year were installed.

Since 1981, when Wen Minsheng became head of the MPT, China has installed over 200,000 telephones a year. Today the MPT is engaged in a major effort to modernize China's communications system, which Mr. Wen describes as "antiquated and extremely poor."

Beijing, which has a population of more than 9 million, has fewer than 130,000 telephones. Service is so bad that businessmen prefer to take a taxi from one end of the city to the other rather than wait for a call to go through.

Inter-city service is even worse. By one official estimate, fewer than 50 percent of all calls placed are successfully completed. A call from Beijing to Shanghai, China's largest city (with nearly 12 million people and 126,000 telephones) requires a wait of up to an hour. Although modernization is proceeding rapidly, there is still no direct dialing between cities. Most switching is done manually across primitive open-wire lines that are subject to interference, making it difficult to hear the other party through the static, causing conversations to end suddenly, and limiting telex and computer transmissions.

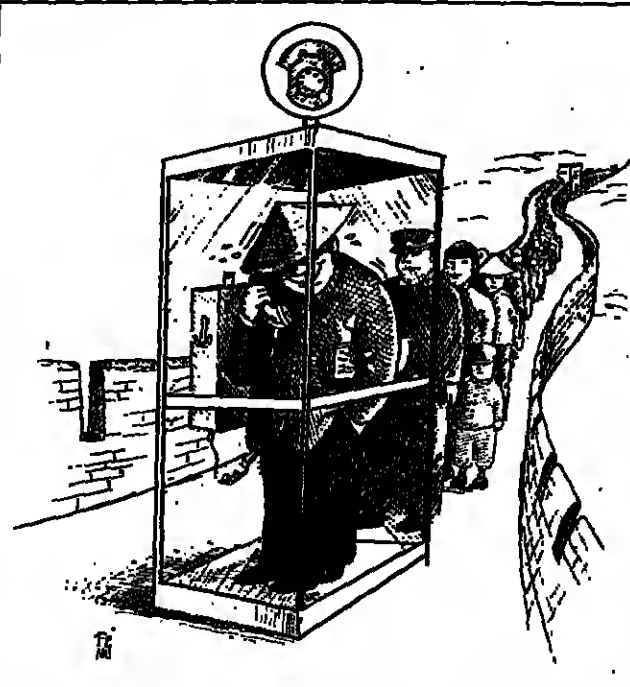
Because CAAC, the government-run airline, is unable to maintain a reliable computer-run system, reservations are frequently

lost, making travel extremely frustrating. Nevertheless, foreign businessmen working in China's major cities often find it necessary to travel to Hong Kong or Tokyo to have access to modern telecommunications facilities.

Recently, the MPT approved an agreement with a consortium of foreign companies to provide mobile telephone service to the city of Guangzhou. By the end of this year, as many as 1,000 telephones are expected to bypass the overloaded long-distance lines and provide direct dialing service to nearby Hong Kong.

Meanwhile, until the new 2,750-kilometer (1,711-mile) long coaxial cable is completed, Guangzhou, which has over 5 million people and about 70,000 telephones, does not have direct telecommunications service with Beijing. This means, for example, that telexes have to be routed through Shanghai. Zhou Zehe, an official at the MPT, said that many enterprises in China are suffering economic losses because they have to function without telexes or telephones. In major cities, there are lists of over 100,000 waiting for telephone installation.

China's powerful State Council is putting intense pressure on the MPT to produce results. Telephone service has not kept pace with the growth of the economy; from 1953



to 1983, when there was a 45-fold increase in industrial productivity, the number of telephones increased only fivefold.

The Chinese leadership is worried by reports that foreign businesses are reluctant to invest in China because the quality of telecommunications is so poor. Officials believe that unless modernization takes place quickly, economic growth will be threatened.

Telecommunications is seen as a way of relieving the stress on an

already overloaded and antiquated transportation system, while at the same time saving scarce energy resources. Last year, an MPT official wrote that "vehicle companies in Beijing and Shanghai have used mobile telecommunications equipment to dispatch vehicles, enabling them to grasp promptly the movement of the vehicles. As a result, these companies have been able to decrease empty load and increase their vehicles' utility rate by 30 to 100 percent."

## A Plea for Third World Assistance

By Larry G. Forrester

BASKING RIDGE, New Jersey — Of the 600 million telephones in the world, three-quarters of them are concentrated in only nine countries. The remainder is distributed unevenly throughout the rest of the world, and in two-thirds of the developing countries there is no telecommunications system adequate enough to even sustain essential human services.

This disturbing situation was, no doubt, in the minds of the delegates to the plenary conference of the International Telecommunications Union in the autumn of 1982 when, in the name of the 159 member states, they decided to establish a commission for worldwide telecommunications development. The mandate given the commission was to recommend ways in which to stimulate the ex-

pansion of telecommunications across the world.

The commission's chairman, Sir Donald Maitland, from the United Kingdom, expressed his personal commitment when he said, "There is no good reason why, by the end of this century, most of the human race should not have easy access to a telephone."

The commission has 17 members, five from Western industrialized countries, two from Eastern Europe and 10 from developing countries.

Even though the role of telecommunications in economic and social development is sometimes debated, the commission has no doubt as to the critical role that telecommunications can play in the Third World. In fact, it is the commission's view that any program for development that does not give

high priority to telecommunications will be unbalanced, and therefore, less effective.

The fact that telecommunications equipment has been designed for use in advanced countries with highly developed networks means that developing countries have little choice but to accept equipment that may be unsuitable for their needs, their environments and their existing resources, such as their supply of energy for producing the required power.

The commission has made substantial progress in determining how the proper conditions can be created within the developing countries.

Ways of improving the quality of service have been outlined, as well as ways of upgrading management and training. Other recommendations were discussed by the commission that would ensure improved decisions regarding the choice of technology and for encouraging research and development in individual countries or regions with the intention of stimulating the local manufacture of appropriate equipment.

Larry G. Forrester, strategic planning manager for AT&T International, is the special assistant to William M. Ellinghaus, the North American representative to the Independent Commission for Worldwide Telecommunications Development.

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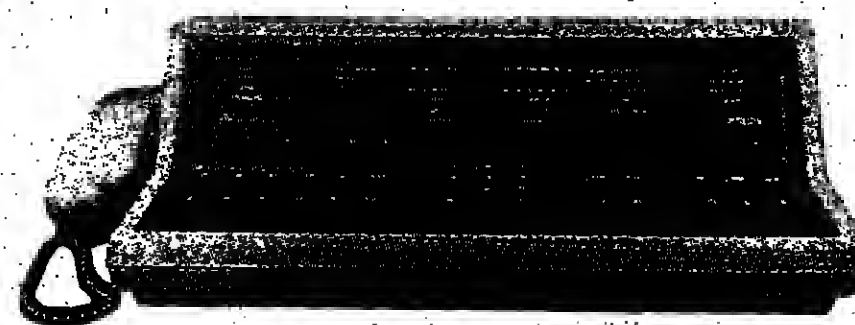
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## ARTS / LEISURE

## Smithsonian May Acquire Capri Villa of American Beauty

By Irvin Molotsky  
New York Times Service

WASHINGTON — The Smithsonian Institution is discussing the acquisition of a villa on the island of Capri that has its origins in the Roman Empire and was owned most recently by an American woman who in the 1930s and '40s was frequently described as the most beautiful and the most fashionable of her day.

When the woman — who was best known as Mrs. Harrison Williams, but who also acquired through several marriages a variety of names and titles, among them Countess Bismarck — died last July in Paris in her late 80s, her death went largely unnoticed in the United States.

The regents of the Smithsonian were told by the institution's secretary, S. Dillon Ripley, that he was discussing acquisition of the villa with a foundation set up by Mrs. Williams under one of her married names, Mona Bismarck.

A Smithsonian official said that the villa had a number of rooms suitable for exhibitions and seminars and that its background suggested it might have archaeological and cultural importance as well.

While the villa has always been considered an aesthetic marvel, the site was appreciated as far back as Roman times. Tiberius used it as part of a royal pleasure park during the Roman Empire. According to Count Rudolf Cresspi, the fashion publicist, it is the most beautiful seaside house in the world.

"The property is fantastic, white roses set off by pink peonies," he said. "It is a masterpiece of very good taste." The villa was one of the many homes owned on two continents by Mrs. Williams. Although she had dropped from the society columns in recent years, she was once so well known that Col. Porter referred to her in a 1936 song, "Ridin' High," sung by Ethel Merman in his Broadway show "Red, Hot and Blue."

Merman played the role of a woman happy to have won her man, singing:

*What do I care  
If Mrs. Harrison Williams  
is the best-dressed woman in town.*

"She was one of the most glamorous leaders of society," said Eleanor Lambert, a public relations executive who deals with society. "She was one of the most elegant women of her day and was always on the best-dressed list. She is immortal as a symbol of fashion. She was tall and even in her youth had prematurely gray hair that was brushed straight back."

Peggy Fitzgerald, who chronicled society's comings and goings for many years on New York radio station WOR and now broadcasts on WNYC, dipped into her records the other day and told of Mrs. Williams' background.

She was born Mona Strader in Lexington, Kentucky, in 1897, the daughter of a stablehand at Fairlane Farm. At 18 she married Harry Schlesinger, who was then 37 years old and the owner of the farm. They were divorced five years later, with the wife receiving a \$200,000 settlement and the husband custody of their only child.

After a short marriage to James Irving Bush, she met Laura Curtis. "Laura Curtis was engaged to Har-

ison Williams, one of the wealthiest men in America," Fitzgerald said. "Miss Curtis went to Paris to buy her wedding clothes and asked Mona to look after her fiancé."

Fitzgerald said that Mona Bush did such a fine job of carrying out her assigned task that in 1926 she, rather than Curtis, wound up marrying Williams, who was 24 years older than she. They moved into his mansion at 94th Street and Fifth Avenue, also maintaining homes in London, the Riviera, Palm Beach, Florida, and on Long Island. They bought the Capri property in 1936.

"She had emerald green eyes," Fitzgerald said. "Salvador Dali said she had the most beautiful eyes in the world. Cecil Beaton called her the greatest lady of taste of the century."

Williams died in 1953. In his obituary, The New York Times reported that at one time in the 1920s he controlled one-sixth of all American public utilities and was once worth \$680 million.

Some years later Mrs. Williams married Count Edouard von Bismarck. After the count died, she married Count Enrico de Martini but resumed the title Countess Bismarck on her last husband's death.

Countess Bismarck in recent years became a benefactor of the Smithsonian, and the institution was not surprised when it was notified that the Mona Bismarck Foundation wanted to discuss with it the disposition of her estate, valued at \$30 million.

What the Smithsonian did not know was the extent of the villa and

its gardens. According to a 1967 article in Vogue, the villa had its beginning when the site was chosen by Caesar Augustus for his principal villa on Capri.

Hence the remains of Augustine brickwork and stonework among the lawns and flowers," the author Valentine Lawford, wrote, "the stretch of polychrome Roman paving outside the changing rooms of the preseat bathhouse, the touching collection of Roman fragments cast up in the course of gardening."

Lawford wrote that the villa, in modern days surrounded by the hamlet of Palazzo a Mare, was joined with other properties by the Emperor Tiberius to transform Capri into an imperial park, only to be destroyed by an earthquake in the year 63.

The villa has massive maritime ramparts, the Vogue article said, and a stone mask by Bernini spews water onto arums and water lilies. There was also "a broken caryatid from Hadrian's villa at Tivoli, bearing a stone basket full of red roses in its upraised hands."

Mrs. Williams, once the toast of high society in New York, spent the last 20 years of her life quietly, dividing her time between Rome, Paris and Capri. Last July 10, at the age of 86, she died. "Up until the end," Count Cresspi said, "she was still beautiful."

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## Portuguese Wine: A Day in the Shade

By Frank J. Priol  
New York Times Service

NEW YORK — Andy Warhol is supposed to have said that in the future everyone in the world will be famous for 15 minutes. Portugal's day in the wine world's sun lasted longer, but not much.

Back in 1960 when, admittedly, imported wine was not exactly clogging U.S. ports of entry, Portugal held just over 2 percent of the market. Ten years later, it held 19 percent, second only to France. By 1980, Portugal's share had plummeted to just over 6 percent and it has continued to drop, at a less spectacular rate, ever since.

These figures relate to table wine. Portugal's most famous wine is, of course, port, and since it is the only source of port, it always has 100 percent of the market.

Two brands, Lancers and Mateus, accounted for almost all of the great boom in shipments of Portuguese table wine 15 years ago. Both are carbonated, sweetened wines. Originally rosé, they are also offered as white wines. There is also a red Lancers. The two wines are both still popular, particularly Mateus, but neither enjoys the prestige it did 15 or 20 years ago.

The two wines, as the wine authority Hugh Johnson has noted, are really a commercial development of the oldest Portuguese wine tradition — *vinho verde*, or green wine. The old procedure was to allow the wine to go through its secondary fermentation, the so-called malolactic fermentation, after it had been bottled and corked. The carbon dioxide produced by fermentation was trapped in the bottle and gave a fizzy effect when the wine was opened.

The Mateus and Lancers producers made a short cut. The fermentation is stopped and carbon dioxide is pumped in artificially. So is sugar, at least for the American market. European versions of these wines are usually drier.

It's interesting to note that the Portuguese themselves have little interest in these wines. But they rarely drink port either, the wine that many connoisseurs consider to be Portugal's national glory.

Incidentally, *vinho verde*, despite its name, is not green. The Portuguese divide their wines into two categories, *verde* and *maduro* — nonaged and aged. Under the Por-

tuguese system of appellation, the name *vinho verde* can legally be used only in the northernmost province of Minho, where most of the white wines come from, but in fact, about 70 percent of it is red.

These wines, like the Austrian whites made in the suburbs of Vienna, are best drunk close to where they are made, and soon after.

Strictly speaking, both Lancers and Mateus are made in the *vinho verde* style, but they are made near Lisbon, in the south of Portugal, and the grapes come from all over the country.

The best-known region for red wines is the Dão, which is in north-central Portugal, the waterway of the port industry.

Critics are divided on the quality of Dão reds. Some say they are too dry and papery, even when well made. Others say the Dão is the Rioja of Portugal, producing soft, rounded red wines that are easy to drink and inexpensive to buy.

In fact, the Dão reds seem to come in various styles, ranging from soft and drinkable to unbalanced and rough. There are some excellent buys among them, but there are many unknown ships that it is wise to consult a reliable retailer before buying.

It is unfortunate that the fame of the two most famous Portuguese brands has not helped the lesser-known wines. They suffer, as do the wines of so many smaller countries, from lack of exposure in the American market. In spite of the mythology, it is really not that hard to make good wine and a great deal of it is made all over the world, in Greece, Yugoslavia, Argentina, Chile, Australia and Portugal.

They would all like to be in the

U.S. market but the solid tradition of drinking domestic and French and Italian wines and the massive marketing efforts behind those wines make it difficult for smaller countries to gain a foothold.

There is not enough space in the retail stores for all the French and Italian wines that would like to be in them. Lesser-known wines have to fight for space.

Even so, the Portuguese wines are worth seeking out, if only as a change from what you normally drink. With the hot weather approaching, some of the light, white wines make excellent aperitifs and good companions for fish. The Portuguese are seafarers and they make their white wines to go with their fish.

Among the Portuguese labels to look for are Serradouras; Alianca, whose *vinho verde* is called Casal Mendes; Quinta da Avelada, whose traditional *vinho verde* is Casal Garcia; and Fonseca, who make Lancers as well as an exceptionally good muscat dessert wine known as Moscatel de Setúbal.

Some of the older reds can be good values. A 1970 Garrafeira Particular from Alianca sells in New York for around \$6.50. Garrafeira Particular means private cellar. Portugal's rarest, and some say best, red wine is called Ferreirinha, which comes from the edge of the port country, in the north.

**Lugano Bathing Ban Ended**  
Resters

LUGANO, Switzerland — Lugano has ended a 13-year ban on bathing at its lake. Tests show the water is no longer a danger to health, tourist officials said.

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Kit Williams with "The Box."

## A Golden Bee Is Reward In Creative-Title Search

By Keith H. Hammonds  
New York Times Service

LONDON — Britain has begun its quest for Kit Williams' newest treasure.

Williams' first book, "Masquerade," inspired a widespread search for a jeweled golden hare buried, it was said, in a public park near Bedford. Published four years ago, it sold two million copies, almost half of those in the United States, or its publisher, Jonathan Cape.

Williams' new book went on sale here May 24. It is like "Masquerade," half children's fable and half treasure hunt. Unlike "Masquerade," it has been published without a title. Hidden in the story — a pleasant tale of bees, changing seasons and, improbably, the London Symphony Orchestra, with 16 illustrations — are clues to the book's missing title. The book sells for £5.95 (about \$8.20) in England and \$10.95 in the United States.

The puzzle is easier this time, and Williams expects that hundreds of thousands of readers will crack it. A British bookseller in the correct answer a day before the book went on sale. (In 1980 and a half years, only two men, a pair of British physics teachers, were able to solve the riddle in "Masquerade.")

Williams has invited readers to find the title and express it without using the written word; correct answers, he suggested, might be knitted and photographed. The answer judges to be most creative will receive a mahogany bee box, which, in addition to holding the only titled copy of the book, is one to a queen bee of 24-karat gold made by Williams. (The author, much wiser for the 30,000 letters from "Masquerade" readers who flooded his home in the Cotswolds, has directed that solutions be sent to Jonathan Cape's warehouse in Grantham and has limited competition to one year.)

Jonathan Cape is counting on a publishing phenomenon akin to the success of "Masquerade." It has ordered an initial press run of 30,000 copies for the new book, and 200,000 of those and the mercurial rights to Alfred A. Knopf Inc. organized a 10-month tour through England of the book's illustrations and considered an exhibition next year of the more creative solutions. The first press run of "Masquerade" was only 60,000 copies and no major American publisher would take it on. (The gits eventually fell to Schocken books, which lost the new book because Williams was dissatisfied with the printing quality in some editions of "Masquerade.")

Williams, 38 years old, is a dapper, elfin man who laughs easily and enjoys playing the eccentric in the many interviews and radio and television appearances that have followed "Masquerade."

Williams, who was reluctant to start "Masquerade" seven years ago, says this book may be his last. It has taken four and a half years and has left him little time for other projects. Currently, he is experimenting with round, three-foot-wide paintings, but does not expect that this will evolve into a formal showing. "I don't know whether artists should bother people with their experiments," he said.

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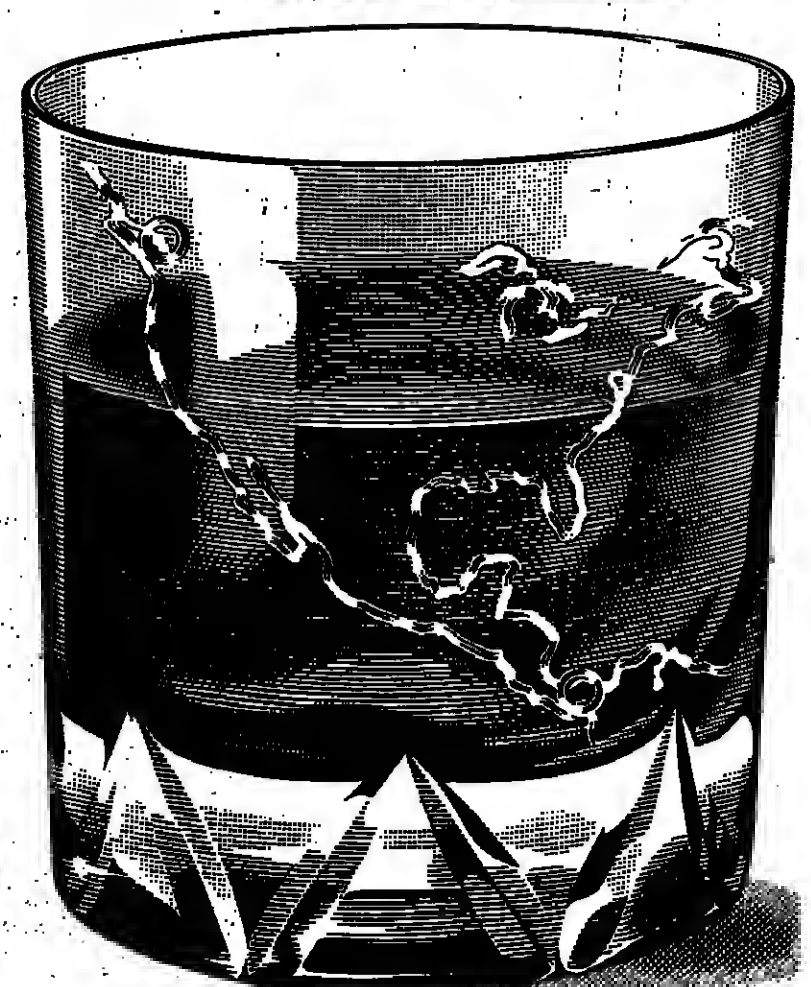
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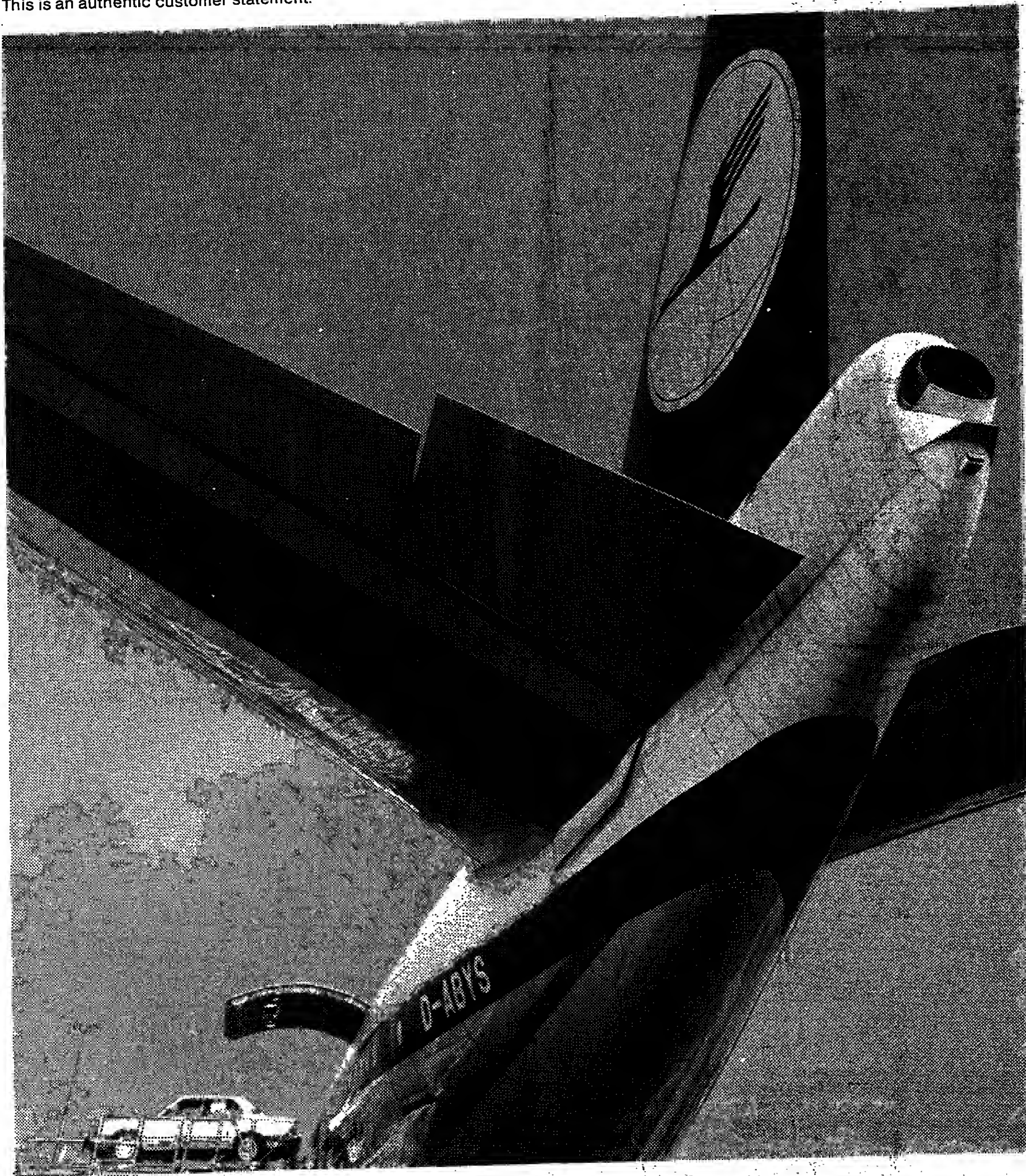
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FUTURES AND OPTIONS

Short Covering Was Crucial  
In Stabilizing the Market

By H.J. MAIDENBERG  
New York Times Service

NEW YORK — If any one factor stabilized the financial-futures market last week, it was the traditional preholiday warning that upstairs trading strategists send to their often groggy pit traders on the Chicago exchanges: "Attention, spreaders day!"

Normally, these warnings are issued on Fridays to remind the pit traders to cover exposed positions for the weekend. Last week, the warnings began Thursday because it was assumed, correctly as it turned out, that most traders would not wait until Friday to cover their positions.

Those who sell futures short are usually in a more vulnerable position than those who have bought contracts because most shorts do not have the underlying instruments to deliver. Last week, the shorts were particularly nervous because many had huge paper profits and wanted to protect themselves against any adverse developments over the long weekend.

The resultant buying on Thursday and Friday of futures in Treasury bills, bonds, bank certificates of deposit and Eurodollar contracts stabilized markets that had been ravaged earlier by unfounded rumors that several major New York banks faced the same problems that would require the Federal Reserve to weave the same financial safety net that it did earlier in the month for Continental Illinois National Bank & Trust Co. of Chicago.

"Most rumors are nonsense, but to ignore them in the futures market is analogous to refusing to get out of the way of a charging bull just because you know the animal shouldn't be there," said Norman E. Matus, the chief financial-futures economist at Dresel Burnham Lambert Inc., Chicago. "In this case the rumors stimulated the flight to quality that caused investment portfolio managers and other investors to unload Treasury bonds, CDs and Eurodollar futures and shift the proceeds into 90-day Treasury bills."

By the close Friday, the spot June T-bill futures were up 49 basis points (a basis point is a hundredth of a percentage point) on the week, but the spot T-bill delivery was down a staggering 38/32. The spot CD and Eurodollar futures finished unchanged for the week, largely because of the short covering.

"There were several other key factors that caused T-bill prices to rise," Mr. Matus noted. "Congress was playing cat and mouse with the administration over the debt ceiling and as a result the Treasury had reduced the supply of bills in recent weeks, at a time when many investors became wary of CDs carrying the name of certain banks."

Meanwhile, T-bill futures had been under increasing pressure from the continuing strength of the U.S. economy, which at this stage of the recovery creates heavy demand for long-term credit. Interest rates were also rising, with the concomitant decline in bond prices, because of what Mr. Matus and many of his colleagues term "a less than caring" attitude by the Congress over the federal budget deficit during this election year.

But as traders eagerly hedged their positions late last week, the spreaders who provide much of a futures market's liquidity were also under intense pressure, especially those who were rolling out of the June contract, which expires June 6, and into the next spot month, September. As one pit trader on the Chicago Mercantile Exchange noted:

"As a rule, the price spread between financial-futures delivery months should reflect short-term interest rates. But with demand for T-bills coming in from all sides, the spreaders had to pay dearly to get their June positions rolled into September. We expect the same to happen with the T-bills later next month, when its spot month goes off the board."

Specifically, the price differential, or spread, of the June bills over those deliverable in September at last Friday's close jumped to 155 basis points from 80 the week before. (The June-September CD spread also exploded, to 130 basis points from 75.)

Most rumors are nonsense, but to ignore them is dangerous.

Building a Financial-Services Empire in U.K.

Jacob Rothschild  
Must Bridge  
Credibility Gap

By Bob Hagerty

International Herald Tribune  
LONDON — Charterhouse J. Rothschild PLC suffers from a name that sounds, as one London newspaper put it, "like Groucho Marx's lawyer."

But finding a snappier name is hardly the toughest challenge facing Jacob Rothschild's ever-expanding financial-services empire: It has developed a credibility problem that might call for the services of Groucho Marx's PR man.

Mr. Rothschild dazzled the financial world by announcing two mergers within six months, each doubling the size of his conglomerate. When the second merger is complete, probably in July, he will preside over a new company — tentatively called Allied Rothschild Charterhouse PLC — embracing life insurance, merchant banking, investment management, venture capital, stockbroking, leasing and factoring.

So far, the London financial community is generally skeptical about the latest merger, which brings in Hambro Life Assurance. Investment analysts and rival bankers accuse Mr. Rothschild of expanding his empire by the stock market, seeing little logic in the loosely connected conglomerate and fearing new acquisitions, has knocked CJR shares down 25 percent since the merger was announced in April.

"My concern with that mob — and it is a mob — is too many chiefs and not enough Indians," the chief financial officer of a big British industrial company said.

At the London stockbrokerage of de Zoete & Bevan, Anthony Muzum, an analyst, said: "I'm not yet convinced that the management is in place to control the whole thing."

In the face of this barrage, Mr. Rothschild and his team are putting



Mark Weinberg

How Company  
Grew to Dwarf  
Family Bank

International Herald Tribune

Four years ago, after a spat with his cousin Evelyn de Rothschild, Jacob Rothschild left the family merchant bank of N.M. Rothschild & Sons. Here is a summary of how he built an empire dwarfing the family bank.

September 1980: Jacob Rothschild leaves N.M. Rothschild but remains head of RIT Ltd., a flashy investment trust. RIT and N.M. Rothschild sever shareholding links.

September 1981: David Montagu, one of Britain's best-known merchant bankers, joins Mr. Rothschild's group after holding top posts at Samuel Montagu & Co., Orion Bank and Merrill Lynch & Co.'s London corporate-finance unit.

March 1982: RIT absorbs Great Northern Investment Trust in a £97-million merger (£134.2 million at current rates). November 1982: RIT buys a 29.9-percent stake in a small London stockbroker, Kinst & Alden, gaining the services of a highly respected trader and investment manager, Nils Taube.

August 1983: RIT & Northern buys 50 percent of the New York investment bank of L.F. Rothschild, Unterberg, Towbin for £42 million.

November 1983: RIT & Northern announces a £400-million merger with Charterhouse Group, parent of a merchant bank and a wide range of industrial investments. The merger creates Charterhouse J. Rothschild PLC, or CJR.

December 1983: Richard Thornton, a well-known British investment manager, joins CJR.

April 1984: CJR announces plans for a merger with Hambro Life Assurance that would create Allied Rothschild Charterhouse PLC, with capital and reserves of about £600 million.



Jacob Rothschild

Fed Ready to Aid  
Troubled Banks,  
Official Asserts

Reuters

WASHINGTON — The vice chairman of the U.S. Federal Reserve Board, Preston Martin, said the Fed was prepared to "lend, lend hold, and keep on lending" if more big U.S. banks got into financial trouble.

Mr. Martin was speaking in a television interview Monday after the rescue of Continental Illinois National Bank & Trust Co. earlier this month. Continental had a run on its deposits starting May 10 after rumors of financial problems at the bank. A week later, the government and other banks stepped in to rescue the Chicago institution.

The Fed official said the Fed was ready to take action similar to the rescue of Continental.

But he rejected a suggestion that United States was on the brink of a banking crisis. "The situation in Chicago [at Continental Illinois] has stabilized. It is a sound bank. What the people who are making good progress there need is time."

The federal rescue plan for Continental was intended to give the bank, the eighth largest in the United States, time to resolve its affairs through a merger or some other means.

Mr. Martin said that "there may be a merger." But he recalled that in a similar case in Pennsylvania in 1980, "the new management was

able to put the bank back on its own feet."

Last week, there were unsubstantiated rumors that another bank, Manufacturers Hanover Trust Co. of New York, was having difficulties and bank shares fell sharply, before stabilizing Friday.

Mr. Martin's comments appeared designed to reassure financial markets that the central bank was prepared to stand fully behind the U.S. banking system, which has heavy loan commitments to Latin America.

On interest rates, Mr. Martin was hopeful of a reduction by the fall. "There's no real economic reason for them to be that high. There is fear and concern that keeps the rates up," he said.

Minutes of the March meeting of the Fed's policy-making Open Market Committee released last week showed that Mr. Martin was the only member to vote against a tighter credit policy.

But he said Monday that he believed the Fed was generally on the right course.

Continental  
Will Repay Fines  
For Withdrawals

Reuters

CHICAGO — Continental Illinois National Bank & Trust Co., in letters to depositors, said Monday it would repay penalties of customers who withdrew money recently.

"With the many rumors reported about Continental Bank recently, we can understand concerns for safety undoubtedly contributed to your decision to close your investment certificate," the bank said.

"As an accommodation to our customers who suffered a financial loss as a result of an early withdrawal penalty incurred during the period of May 7 through May 18, we are extending this limited offer: If you open a Continental bank investment certificate — for any maturity currently offered for the amount you withdrew — we will deposit an immediate bonus interest payment in your account that equals the funds you lost on the early withdrawal penalty for your previous certificate," the bank said.

Major U.S. Banks Expanding Activities in Western Europe

By John Tagliabue

New York Times Service  
FRANKFURT — Several of the biggest U.S. banks, chastened by troubled loans to Latin America and in search of new fields, are expanding their activities in Western Europe.

Traditionally, U.S. bank offices abroad have been set up almost exclusively to serve large corporate customers. But now, faced with flagging loan demand in other parts of the world and encouraged by what some bankers described as a rebirth of the profit motive in Europe, many U.S. banks consider Europe a potential source of increased business from large and small companies.

"One fact is valid for all the United States banks: Because the

rest of the world is more difficult, they are turning back to Europe," said Eberhard Weiershauser, management board chairman of Chase Bank AG, the West German subsidiary of Chase Manhattan Bank. He also noted a new political atmosphere, particularly in Britain and West Germany, that is shifting emphasis from "income redistribution to profit as a basis for growth."

The largest U.S. bank, New York's Citibank, is planning a major push into services for medium-size and small businesses — a sector that its executives call the middle market.

Chase Manhattan is regrouping its forces in West Germany and elsewhere after a failed leap into the European consumer-banking business in the 1970s. Manufactur-

ers Hanover Trust Co., according to a bank official, plans an expansion of the five-bank network it has built in West Germany.

Morgan Guaranty Trust Co., which primarily deals with large corporations, is not following the trend into the middle market. But it is seeking to develop cheaper ways to finance major capital-goods investments for its big export-oriented clients.

The banks say they sense an advantage over their European competitors because U.S. banking is more technologically advanced and more experienced in using innovative financial instruments, such as currency-exchange options.

The six Citibank branches in West Germany, plus a seventh recently opened in Nuremberg, have begun touting the advantages of their electronic-banking system to businesses with annual sales from \$20 million to \$100 million. Many of these companies do a brisk export business that Citibank offi-

cials hope will entice them to adopt modern money-management techniques.

Electronic banking uses computer data processing to transfer funds and perform other tasks, eliminating much time-consuming paperwork.

"We all know that money is expensive," Friedrich W. Menzel, treasurer of Citibank AG, said in an interview. "So, to move it faster saves money."

Kurt F. Viernitz, Morgan Guaranty's general manager in Frankfurt, says Morgan is trying to win business by assembling unconventional financing packages.

Morgan attracted attention last summer with a leasing agreement it arranged for Bethlehem Steel Corp. That plan enabled Bethlehem to acquire \$500 million of casting equipment from the Austrian steel company, Voest-Alpine.

The package allowed Bethlehem to take advantage of Austrian government-subsidized bank lending

rates, while the financing banks claimed corporate and investment tax credits that enabled them to be relatively lenient on the loan terms with Bethlehem.

"The great new ideas came from outside," Mr. Viernitz said. "That means the business is going to the banks that developed them."

The growing interest in Europe is not without its risks. The European market is crowded and fiercely competitive, local bank officials note. And interest rates that are relatively low, compared to Latin America, for example, mean a narrower spread between a bank's cost of funds and what it can charge.

Moreover, the small, family-owned companies that make up the middle market are often reluctant to shift business from banks that have served them for generations. "The middle market in Europe is difficult, if not dangerous, and the traditional American banker is not equipped to do this business," one West German banker cautioned.

W. German Trade Data  
Disappoint Analysts

Reuters

WIESBADEN, West Germany — West Germany's current account showed a provisional 400-million-Denmark (146.8-million) deficit in April after a 1.9-billion-Denmark surplus in March, the Federal Statistics Office said Monday.

Economists said the April figures for merchandise trade and for the current account were very disappointing. They are particularly disappointing because the effects of strikes demanding a 35-hour work week will not appear until data for May are released.

The current account is the broadest measure of trade, including merchandise and nonmerchandise items, such as services. The merchandise trade account had a provisional surplus of 2.6 billion DM, a sharp narrowing from a 4.5-billion-DM surplus in March.

In April last year, the current account had a surplus of 33 million DM, while the trade surplus was 2.67 billion DM.

The data for March were revised from provisional estimates. The statistics office said imports in April totaled a provisional 35.66 billion DM, up from 31.13 billion DM a year earlier, while exports rose to 38.21 billion DM from 33.83 billion DM.

In value terms, imports were 5.7 percent lower in April than in March, while exports fell 9.8 percent.

For 1984's first four months, the current account had a 1.5-billion-DM surplus, compared with a 5.2-billion-DM surplus a year earlier. The trade surplus fell slightly, to 13.9 billion DM from 14.6 billion DM.

In value terms, imports in the first four months totaled 144.4 billion DM, up 16 percent from a year earlier, and exports rose 14 percent to 158.3 billion DM.

Peter Wolfmeyer, an economist at Westdeutsche Landesbank Girozentrale, said that on a seasonally adjusted basis, the trade surplus for the first four months was about 14.5 billion DM. That would give a full year figure of about 43.5 billion DM.

This would be just above 1983's 41.98 billion DM, but well below forecasts earlier this year of a 55-billion-DM surplus, which now seems far too optimistic, Mr. Wolfmeyer said.

The weak April trade data could have been affected by this year's Easter holidays, as Easter in 1983 fell partly at the end of March, Mr. Wolfmeyer said.

Economists said that in addition to the effect of the three-week oil strike in the auto industry, a traditionally strong export sector, the value of imports is likely to rise as the dollar's recovered strength against the mark works through.

Mr. Wolfmeyer said he had expected April's trade surplus to outstrip March's 4.54 billion DM, as companies tried to bring forward export deliveries to head off strikes.

The weak current account in April reflects above all a 2.2-billion-DM deficit on transfers after a 1.9-billion-DM March deficit and a deficit of 2 billion DM a year ago, economists said.

The April nonmerchandise trade account showed the deficit widening to 1.1 billion DM from 900 million in March and 865 million DM a year earlier.

But the German current account is traditionally very strong in the final quarter and economists said there is as yet no reason to doubt that 1983's surplus of 10.06 billion DM can be repeated.

EC Inflation Up  
In April, Fell  
For 12 Months

The Associated Press

LUXEMBOURG — Consumer prices rose 0.8 percent in April in the European Community, mainly due to strong increases in Greece and Britain, the European Statistics Office reported Monday.

Although this is the biggest monthly increase since last October, the 12-month inflation rate (from April 1983 to April 1984) of 7.7 percent was the lowest for more than five years.

The inflation rate in April was 1.9 percent in Greece, 1.3 percent in Britain, 0.7 percent in Italy and Luxembourg, 0.6 percent in France and Belgium, 0.3 percent in the Netherlands and 0.2 percent in West Germany and Denmark.

The Irish inflation rate is calculated on a three-month basis. It was 2.4 percent in February. The 12-month rate was 17.1 percent in Greece, 11.5 percent in Italy, 7.8 percent in France and Luxembourg, 7.5 percent in Belgium, 6.6 percent in Denmark, 5.3 percent in Britain, 3.5 percent in the Netherlands and 3.2 percent in West Germany.

CURRENCY RATES

Local interbank rates on May 25/28, excluding fees.  
Official findings for Amsterdam, Brussels, Milan, Paris, New York rates of 2:00 p.m. EDT.

	\$	£	D.M.	F.F.	Y.	S.F.	Y.	Y.
Amsterdam	3.7525	4.254	112.225	36.61	6.182	5.571	136.67	132.24
Brussels (a)	36.4	74.8	28.78	4.652	2.294	18.78	24.72	24.00
Frankfurt	2.72	—	—	32.51	1.616	4.96	127.35	117.7
London (a)	1.288	—	3.795	11.644	2.2051	4.254	74.72	31.10
Milan	1.60720	2.3320	618.72	20.16	59.29	30.52	762.7	7.28
New York (a)	1.284	—	3.7232	8.3922	1.6053	3.3525	2.50	30.45
Paris	6.9725	11.616	30.725	—	4.7745	27.88	15.101	37.82
Tokyo	251.775	212.68	65.2	—	3.70	3.58	73.3	41.65
Zurich	2.258	2.118	62.38	24.782	6.3384	73.075	4.6718	—
1 ECU	0.912	0.9719	2.2943	4.671	1.28213	2.5185	45.579	1.845
1 DEM	1.6047	0.72625	2.6141	8.7541	1.70425	3.204	57.181	2.543

	\$	£	D.M.	F.F.	Y.	S.F.	Y.	Y.
Frankfurt	1.1255	—	—	—	—	—	—	—
Austria (a)	1.1255	—	—	—	—	—	—	—
Austria (b)	1.1255	—	—	—	—	—	—	—
Belgium (a)	1.1255	—	—	—	—	—	—	—
Belgium (b)	1.1255	—	—	—	—	—	—	—
Canada (a)	1.1255	—	—	—	—	—	—	—
Canada (b)	1.1255	—	—	—	—	—	—	—
Denmark (a)	1.1255	—	—	—	—	—	—	—
Denmark (b)	1.1255	—	—	—	—	—	—	—
Finland (a)	1.1255	—	—	—	—	—	—	—
Finland (b)	1.1255	—	—	—	—	—	—	—
France (a)	1.1255	—	—	—	—	—	—	—
France (b)	1.1255	—	—	—	—	—	—	—
Germany (a)	1.1255	—	—	—	—	—	—	—
Germany (b)	1.1255	—	—	—	—	—	—	—
Greece (a)	1.1255	—	—	—	—	—	—	—
Greece (b)	1.1255	—	—	—	—	—	—	—
Italy (a)	1.1255	—	—	—	—	—	—	—
Italy (b)	1.1255	—	—	—	—	—	—	—
Japan (a)	1.1255	—	—	—	—	—	—	—
Japan (b)	1.1255	—	—	—	—	—	—	—
Netherlands (a)	1.1255	—	—	—	—	—	—	—
Netherlands (b)	1.1255	—	—	—	—	—	—	—
Portugal (a)	1.1255	—	—	—	—	—	—	—
Portugal (b)	1.1255	—	—	—	—	—	—	—
Spain (a)	1.1255	—	—	—	—	—	—	—
Spain (b)	1.1255	—	—	—	—	—	—	—
Sweden (a)	1.1255	—	—	—	—	—	—	—
Sweden (b)	1.1255	—	—	—	—	—	—	—
Switzerland (a)	1.1255	—	—	—	—	—	—	—
Switzerland (b)	1.1255	—	—	—	—	—	—	—
Taiwan (a)	1.1255	—	—	—	—	—	—	—
Taiwan (b)	1.1255	—	—	—	—	—	—	—
Thailand (a)	1.1255	—	—	—	—	—	—	—
Thailand (b)	1.1255	—	—	—	—	—	—	—
United Kingdom (a)	1.1255	—	—	—	—	—	—	—
United Kingdom (b)	1.1255	—	—	—	—	—	—	—
United States (a)	1.1255	—	—	—	—	—	—	—
United States (b)	1.1255	—	—	—	—	—	—	—
West Germany (a)	1.1255	—	—	—	—	—	—	—
West Germany (b)	1.1255	—	—	—	—	—	—	—
Yugoslavia (a)	1.1255	—	—	—	—	—	—	—
Yugoslavia (b)	1.1255	—	—	—	—	—	—	—

1 Dollar = 1.2291 Irish £  
1 Continental franc (b) Amounts needed to buy one pound (c) Amounts needed to buy one dollar (\*)  
Units of 100 (a) Units of 1,000 (b) Units of 10,000  
N.B.: not rounded; N.A.: not available.



## BUSINESS ROUNDUP

## Reuters's Financial-Data Service Fuels Growth

By Barnaby J. Feder

New York Times Service

LONDON — For millions of newspaper readers, the name Reuters has been familiar for more than a century on news stories from every corner of the globe. To investors, however, Reuters's highly regarded international news service is not the attraction as they consider the 114 million shares of Reuters stock that will be sold here and in New York Thursday.

The stock issue, which is meant to raise up to \$370 million for Reuters's institutional and newspaper owners, is structured to leave up to 25 percent of the company in public hands. The actual share price will be set Thursday on the basis of tenders and consultation between investment bankers in London and in New York.

The Reuters that investors will be buying into is a diversified communications concern that has grown into a major force in financial-data reporting. Some 20 years ago, Reuters sized up the implications of computers for traders and financial analysts and started down a path that has since given it a pivotal role in reporting and handling financial data and information in the world's financial centers.

The company has 15,000 subscribers, who use more than 32,500 video terminals and 6,500 teleprinters to display market prices for everything from currencies to oil-tanker rentals. In such fields as currency trading, the network allows direct dealer-to-dealer connections and is increasingly being used to carry out the transactions themselves.

Reuters does not break out separate results for its two operating arms, but analysts say there is no doubt that the financial-data network, and not the news agency, is behind its growth.

The company's pretax profits jumped from \$2.7 million on sales of \$125 million in 1980 to \$79.6 million on sales of \$337.3 million last year.

It is the growth potential and the investment needs of the financial operations that convinced the British newspaper owners who control Reuters, many of whom are short of funds for their publishing operations, that it was time to cash in part of their stake.

Analysts agree that Reuters has plenty of room for expansion over the next several years, but are cautious about their ability to predict where the financial-information revolution is headed.

"Reuters has got a jolly useful headstart, but that's about all you can say at this point," said Jennifer Nibbs, publishing analyst at Buckmaster & Moore in London. "The really difficult thing is to figure out what the competition is doing."

Reuters's nearest competitor is Telerate Systems Inc., a rapidly growing, 15-year-old company controlled by Britain's Exco International PLC.

Telerate has yet to match Reuters's range of services, but it leads in the number of terminals installed in the United States, the major market for both companies. Telerate has also established a strong lead in the United States in reporting on government securities and money markets.

Numerous other companies, such as Commodity News Service Inc., Quotron, Quick of Japan and Telexur of Switzerland also compete with Reuters to supply certain types of information in certain areas.

As Reuters races to expand the features it is offering users for storing, retrieving and manipulating data, it is plunging into areas where it will be competing with everyone from analytical services like Dun & Bradstreet to information technol-

ogy companies anxious to establish their equipment in the so-called office of the future.

In the long run, though, the key question is how fast, and how profitably, Reuters can grow. Analysts here say that neither the Reuters prospectus, nor independent sources, yield a clear picture of how close Reuters's major markets are to saturation.

One assumption, based on an analysis by Telerate, is that there is room for at least several more years of strong expansion. But analysts dismiss the projection as guesswork.

Reuters's greatest strength is its "contributed-data" networks, where the users of Reuters video monitors are also a source of market information. Contributed data are essential for situations like currency trading, where there is no central exchange, or in shipping markets, where considerable dealing is carried out after the close of the Baltic Exchange here.

By contributing market information to the network, dealers in essence are using Reuters electronic exchange as a substitute for an actual trading room.

"The electronic marketplace makes it possible to have interna-

## Largest Reuters Shareholders And How They Are Affected by Offering

	How many shares they own	How many shares they are selling	Estimated value of shares sold (\$m)
First Holdings	31,100,000	2,200,000	5.0-7.5
Reuters	24,000,000	2,000,000	4.5-6.5
Associated Newspapers	10,100,000	1,100,000	2.5-3.5
Newspaper Ltd.	27,000,000	0	0
Bank of England	24,000,000	0	0
The Guardian and Telegraph	14,000,000	2,700,000	3.0-4.0
Financial Times	14,000,000	2,700,000	3.0-4.0
International Thomson Organisation	14,000,000	11,000,000	11.0-15.0
S. Pauline & Son	12,000,000	3,000,000	3.0-4.0
United Newspapers	8,213,917	740,000	2.0-3.0

The New York Times

tional markets and many more participants than you can get on an exchange floor," said Martin Roeder, a specialist in information networks for Arthur D. Little & Co. in Cambridge, Massachusetts.

The importance of user input is highlighted in the U.S. government-securities market, where Reuters has been unable to dent Telerate's dominance. Telerate has an exclusive agreement with one of the five central brokers in the market to supply price quotations, an arrangement that Reuters has thus far been unable to match.

In other markets, such as equity-price quotations, Reuters receives its information from central exchanges, as do its competitors. Here, the need is to compete in terms of speed, reliability, format of presentation, and, increasingly, the ability to offer such extra features as automatic monitoring of selected stocks for preset buy and sell points.

Finally, Reuters is assembling more of the information it disseminates into data bases that users can tie into, adding data storage and retrieval to its delivery business.

## Air Florida Is Buffeted By New Financial Crises

By Agis Salpukas

New York Times Service

MIAMI — Air Florida, the airline that was going to show the established carriers how to thrive under deregulation, is now reeling from one financial crisis to another.

The Miami-based carrier, one of the first low-fare carriers to spring up after the industry was deregulated in 1978, has had losses of \$138 million since 1980, when it earned \$5.7 million. To keep flying, it has sold assets, slashed its payroll and renegotiated its debt with lenders, primarily General Electric Credit Corp., the credit arm of General Electric Corp. of the United States.

The survival of the upstart now seems largely dependent on the established competitors that it once vowed to shake up.

Recently, for example, Air Florida was attempting to persuade Delta Air Lines to honor its tickets and handle its baggage under an interline agreement. And as Air Florida executives were trying to put out that fire, another broke out: Eastern Airlines said that it would accept Air Florida tickets written by Air Florida only for flights on Eastern. Eastern said it was taking the action in regard to Air Florida to "reduce our financial exposure."

Under standard interline agreements, airlines will honor each other's tickets on an unrestricted basis; for example, a passenger holding an American ticket could use it on an Eastern flight if that were more convenient.

The canceling of what are called interline agreements by the two major carriers, however, could be a severe blow to the struggling airline by making it difficult to link up its passengers with connecting flights on those carriers.

However, said Robert Jodick, airline analyst for Shearson Leh-

man/American Express, "the elimination of the interline agreements in itself is not a reason to file for bankruptcy." He said that it was the cash squeeze on Air Florida that was the problem.

On another front, Air Florida was warned by the Airlines Clearing House, which settles accounts among carriers, that it may lose its membership if it does not pay a \$2-million past due account by Tuesday.

The airline has undergone several financial restructurings. Interfirst Bank of Dallas threw the airline into default twice and seized its receivables. So far, however, with an infusion of money from GECC in return for options to buy stock, the carrier has been able to squeak through. According to sources, negotiations are under way to have GECC lead it the \$5 million needed to cover its obligations.

GECC, however, has demanded that in return for the loan it take over the liens on planes.

## Mitsubishi Sets Nippon Oil Link

Reuters

TOKYO — Nippon Oil Co. and Mitsubishi Oil Co. agreed on a link including refining and marketing, spokesmen for both companies said Monday.

Under the agreement, the two concerns jointly will import crude oil, charter tankers, share oil tanks and adjust marketing prices.

The Nippon-Mitsubishi group will become Japan's leading oil distributor, with a domestic market share of 25 percent, industry sources said.

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## COMPANY NOTES

Creditanstalt-Bankverein of Vienna sold 74 percent of the nominal share capital of its subsidiary Bankhaus Herlitz and Kallmann AG to the Italian banking group Istituto Bancario San Paolo di Torino/Banco Lariano. Creditanstalt declined to disclose how much San Paolo paid, but banking sources estimated the price at about \$5 million.

Fuji Electric Co. expects a 10-percent rise in profit to 9.30 billion yen (\$40.25 million) in the year ending March 31, 1985, managing director Kinetaro Ono said. Sales for the year are expected to rise 5 percent to 575 billion yen on continuing strong demand for electric motors, meters, electronic parts and automatic vending machines, he said. The company will retain a 5-yen dividend for the year.

Gold Peak Industries (Holdings) Ltd., which makes batteries and car audio products, is likely to offer shares representing about 35 percent of the company to the public in early June, the company and the sole underwriter, Schroders & Chartered Ltd., said. The issue will raise 90 million to 110 million Hong Kong dollars (\$11.5 million to \$14 million), representing 60 million to 63 million shares, Schroders said. It will be the first public share offering in Hong Kong since the British foreign secretary, Sir Geoffrey Howe, said in April that Britain will relinquish sovereignty to China in 1997. Gold Peak said it had after-tax profits of more than 20 million dollars in the year ended March 30 and expects a

rise of about 50 percent in after-tax profits for the current fiscal year. Hutchison Whampoa Ltd. said holders of 110.48 million ordinary shares elected to receive new shares in lieu of a special 4-Hong-Kong-dollar-a-share cash dividend. A total of 432.02 million shares were eligible. The company said this would mean the issue of 37.9 million new 1-dollar shares, subject to shareholder approval at its annual general meeting Thursday.

Swire Pacific Ltd. expects net 1984 earnings of more than 1.03 billion Hong Kong dollars (\$131.78 million), up from 837.2 million in 1983 upon a successful acquisition of minority interests in a 72.5-percent held subsidiary Swire Properties Ltd. The company proposes the issue of 130 new Swire Pacific "A" shares, plus 1,610 dollars cash for every 500 Swire Properties shares.

## COMPANY EARNINGS

Revenue and profits, in millions, are in local currencies unless otherwise indicated.

Australia			
Thomas Nationwide			
3rd Qu.	1984	1983	
Revenue	427.8	420.7	
Profits	1.57	2.74	
9 Months	1984	1983	
Revenue	1,220	1,148	
Profits	16.99	20.10	

Full names of company is Thomas Nationwide Transport.



2 FOR 1

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Denmark	D Kr.	1,800	750	410
Finland	F Mk.	1,120	560	308
France	F Fr.	1,000	500	260
Germany	D.M.	412	208	113
Greece	Dr.	12,400	6,200	3,450
Ireland	E Ir.	104	52	29
Italy	Lire	215,000	108,000	58,000
Luxembourg	L Fr.	7,300	3,650	2,000
Netherlands	Fl.	450	225	124
Norway	N Kr.	1,180	590	320
Portugal	Esc.	11,200	5,600	3,050
Spain	Ptas	17,400	8,700	4,800
Sweden	S Kr.	1,180	590	320
Switzerland	S Fr.	312	156	102
The rest of Europe, North Africa, Japan, French Africa, U.S.A., French Polynesia, Middle East				
	\$	241	121	78
Rest of Africa, Canada, Latin America, Gulf States, Asia				
	\$	285	143	102



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## Debt Crisis in the Third World Is Intensifying

(Continued from Page 1)

interest charges for every one-point rise in interest rates is closer to \$1.7 billion.

And if interest rates are rising, many experts point out, it is because economic growth is more rapid than desired, and that rapid growth, they add, is worth more to the developing countries than the rise in debt costs.

"A one percentage-point change in OECD growth has seven times as much impact as a one percentage-point change in interest rates," William R. Cline, a senior fellow at the Institute for International Economics, told a recent congressional hearing.

Nevertheless, the rate increases call into question the strength and durability of the business recovery now under way in the industrialized world. This recovery is essential for the export sales and hard-currency earnings that developing countries need to service their debt.

Despite all the official talk—and there is a lot of it—about the management of the Third World's debt crisis being "on schedule," there is no escaping the conclusion that the crisis of alarm from the developing countries and the signs of alarm in world financial markets

are sapping public confidence in the banks, primarily U.S. ones, that hold the bulk of this debt.

Last Thursday, financial markets had a gasp of panic as unanticipated rumors about the liquidity of Manufacturers Hanover Trust Co., the fourth-largest U.S. commercial bank, sent bank share prices skidding in New York and the dollar tumbling on foreign-exchange markets.

Calm was restored on Friday, but there was a notable shift of funds into U.S. Treasury paper, the safest dollar investment vehicle, widening the gap between rates for commercial borrowers. At the same time, the gap between very short-term interest rates and longer-term rates widened, indicating that investors were seeking short-term security at the expense of higher remuneration.

Markets in the United States were closed Monday for the Memorial Day holiday and in Britain for a bank holiday.

The ease with which rumors about the banks flourished—Manufacturers Hanover, while the most prominently mentioned, was not the only bank rumored to be in difficulty—and the market re-

sponse was ample evidence that confidence, the essential fabric of financial markets, is fraying.

At the base, are worries about the ability of banks to survive if their loans to developing countries go sour. While the U.S. banking authorities' salvage of Continental Illinois, crippled by bad loans to domestic U.S. clients, publicly demonstrated that depositors will receive unlimited protection, fears about what this means for the ability of the Federal Reserve to manage its monetary policy so as to keep the current robust business recovery from overheating.

In fact, it was the Fed's concern about the impact of an overly stimulative federal budget deficit that prompted the rise in interest rates. This rise provoked cries of alarm from the major debtors and fueled anew fears about the ability of developing countries to service their bank debt.

The strategy adopted in the summer of 1982—economic adjustment by the debtor countries, increased growth in the industrialized world, increased lending by the International Monetary Fund, continued lending by

commercial banks and the availability of emergency bridging loans from the industrialized countries—remains in place. The major policy-makers, led by the U.S. Treasury, remain committed to this "ad hoc" approach. They see it as successful to date and as adequate to handle the problem, which is seen lasting at least through the end of this decade.

But in the wake of the renewed rise in U.S. interest rates and the feared impact on economic growth in the industrialized world, an increasingly wide group of experts is questioning the continued efficacy of that strategy.

Their argument is that the current strategy has a short-term goal of averting a potential crisis. No one disputes the view that it has succeeded. But the strategy, they note, fails to address the fundamental medium-term issue of what can be done to ease the debt burden.

Academic economists have been saying this from the beginning of the crisis. But, significantly, leading bank economists are now joining this chorus.

This is the first of two articles on the world debt crisis.

## GDP of China Is Seen Growing By 8% in '84

By Reuters

HONG KONG — China's gross domestic product is expected to grow more than 8 percent in 1984 despite central government moves to slow the economy's growth, the Bank of America said Monday in an economic survey of Asian countries.

The survey, released here, said Hong Kong's GDP is also likely to grow an inflation-adjusted 8 percent this year. GDP is a measure of a nation's output of goods and services, excluding foreign investments.

It also forecast real GDP growth of 9.5 percent in Singapore, the highest expected in the region. It said the structure of Singapore's economy would continue to change, with a shift towards electronics-related exports.

Exports of crude oil and liquefied natural gas should help Malaysia's economy grow 6.5 to 7 percent, the bank said.

## Prague to Partly Honor 1920s Bonds

New York Times Service

NEW YORK — More than 60 years after being issued, defaulted Czechoslovak bonds with a face value of about \$3 million will be honored—at least, in part.

The Czechoslovak Finance Ministry signed an agreement in New York on Friday to settle claims on the bonds. The agreement was also signed by the Foreign Bondholders' Protective Council, a nonprofit organization representing holders of foreign bonds in the United States. The bonds were issued by the City of Prague in 1924, and those of the City of Greater Prague, dated 1922.

Of the \$23 million of national bonds issued, about \$1.5 million are outstanding. Of the \$9 million in municipal bonds issued, around \$1.3 million were never redeemed. Most

of the bonds, issued in denominations of \$500 and \$1,000, were bought by Czechoslovak-Americans recovering the outstanding bonds, after 60 years in attics or in safe-deposit boxes, will not be easy. Bondholders will be informed of the agreement through a series of financial advertisements paid for by the Czechoslovak government.

"Finding a majority of bondholders is unusual. We have been as low as 10 percent. I would hope to approach 50 percent," said Mr. Petry, who has helped to resolve previous disputes over defaulted bonds from Poland, Bulgaria and Romania.

"On a prewar bond, the past-due interest is often more than the principal," he said.

commercial counselor of the Czechoslovak Embassy in New York, who witnessed the signing.

"We need to achieve a settlement, and the amount to be paid will be a function of how many bonds are found," said John R. Petry, president of the council and chairman of Marine Midland Bank.

Among the eight series of bonds falling under the agreement are national bonds issued by the Czechoslovak Republic in 1922; municipal bonds issued by the City of Prague in 1924, and those of the City of Greater Prague, dated 1922.

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"We need to achieve a settlement, and the amount to be paid will be a function of how many bonds are found," said John R. Petry, president of the council and chairman of Marine Midland Bank.

Among the eight series of bonds falling under the agreement are national bonds issued by the Czechoslovak Republic in 1922; municipal bonds issued by the City of Prague in 1924, and those of the City of Greater Prague, dated 1922.

Of the \$23 million of national bonds issued, about \$1.5 million are outstanding. Of the \$9 million in municipal bonds issued, around \$1.3 million were never redeemed. Most

of the bonds, issued in denominations of \$500 and \$1,000, were bought by Czechoslovak-Americans recovering the outstanding bonds, after 60 years in attics or in safe-deposit boxes, will not be easy. Bondholders will be informed of the agreement through a series of financial advertisements paid for by the Czechoslovak government.

"Finding a majority of bondholders is unusual. We have been as low as 10 percent. I would hope to approach 50 percent," said Mr. Petry, who has helped to resolve previous disputes over defaulted bonds from Poland, Bulgaria and Romania.

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## Jacob Rothschild's Empire Faces Credibility Gap as Expansion Continues

(Continued from Page 15)

together a corporate strategy, and trying to find a clear way to explain it.

As a first step to reduce the market's anxiety, Allied is promising to forgo big acquisitions for a spell.

"The big bang types of thing are behind us," said Mr. Weinberg, who will be chief executive of Allied Rothschild and, along with Mr. Rothschild, joint chairman. "The challenge now is to pull the pieces together."

If anyone can do that, observers say, it is Mr. Weinberg. At age 52, the South African-trained lawyer is one of Britain's most celebrated financial innovators. From a £1-million investment in 1971 (\$1.38 million at current rates), he rapidly built Hambro Life into one of Britain's highest and most profitable life insurers.

Until recently, Mr. Weinberg rejected the idea of a financial conglomerate. He still has his reservations.

"I don't believe in financial conglomeration for the sake of financial conglomeration," he said.

So why merge Hambro Life and Mr. Rothschild's CJR? Mr. Weinberg points to "synergies" and his esteem for Mr. Rothschild, as well as a long-term need for more capital and a broader range of products to cope with what he sees as a revolution in financial services.

Computer technology and the breakdown of barriers between banks, brokers and insurers will mean fast growth for companies that can use the same salesmen to sell a dozen or so financial products, Mr. Weinberg said. Maintaining a huge sales force to peddle just one or two products, he said, is woefully inefficient.

Commercial banks and such big brokers as Merrill Lynch & Co. are slowly moving toward an "integrated" approach to selling. "The rest of us won't be able to compete with them unless we go down the same route," Mr. Weinberg said.

There, he argues, lies the logic of Allied Rothschild.

The core of the new company will be Hambro Life and its 3,000 salesmen. Already, Hambro Life calls the top 25 percent of its salesmen "financial management consultants." Along with life insurance, they sell such products as pensions, investment and cash management, and tax-planning advice.

Britain appears to be a good candidate for a trial of Mr. Weinberg's marketing ideas. There are no stockbrokers with nationwide networks of offices; only the big commercial, or clearing, banks and the insurers have access to masses of well-heeled but financially unsophisticated customers.

Training the salesmen and coordinating a conglomerate, however, will not be easy, as even Mr. Weinberg concedes.

More and more financial companies will "leverage" their sales networks by adding new products, agreed David Schrempf, president of Cigna International, the overseas unit of the U.S. insurance giant Cigna Corp. But he warned against trying to solve too many personal financial problems with one sales force: "There's only so much one salesman can do well."

The lone salesman will never be an expert in a dozen products, Mr. Weinberg allowed. "What he does know is that there are some technical backup people in the organization, and what their phone number is."

If insurance salesmen will market the products, the rest of Allied will create them. But the rest of Allied is an odd mixture, and analysts are asking: "Where's the synergy?"

Paris Commodities May 28

Sugar prices in francs per metric ton. Other prices in francs per 100 kg.

Asian Commodities May 28

HONG-KONG GOLD FUTURES U.S. \$ per ounce

SINGAPORE GOLD FUTURES U.S. \$ per ounce

KUALA LUMPUR RUBBER Malaysian cents per kilo

SOYBEAN OIL U.S. \$ per bushel

COFFEE U.S. \$ per cwt

PEPPER U.S. \$ per cwt

LEVERAGED CAPITAL HOLDINGS N.V.

Curacao, Netherlands Antilles

Notice of Annual General Meeting of Shareholders

Notice is hereby given that an Annual General Meeting of Shareholders of Leveraged Capital Holdings N.V. has been called by the Manager, Intimus Management Company N.V.

The Meeting will take place at the offices of the Company, John B. Gossardweg 6, Willemstad, Curacao, Netherlands Antilles on 21st June, 1984 at 10.00 a.m.

The Agenda, the Annual Report for 1983 and further details may be obtained from the offices of the Company or from the Paying Agent mentioned hereunder.

Shareholders will be admitted to the meeting on presentation of their certificates or of vouchers, which may be obtained from the Paying Agent against delivery of certificates on or before 14th June, 1984.

Willemstad, 29th May, 1984.

INTIMUS MANAGEMENT COMPANY N.V.

Paying Agent: Pierson, Heijding & Pierson N.V. Herengracht 214 Amsterdam.

L.F. Rothschild, Uterberg, Towbin, the New York investment bank in which CJR holds 50 percent, and CJR's London merchant bank, Charterhouse Japhet, both specialize in financings for emerging companies. While Allied officials say they would like to serve the blue chips, they probably will concentrate on their niche.

"Yes, I'd like to have ICI as a client," said John Hyde, chairman of Charterhouse Japhet, "but I'm realistic."

Mr. Rothschild and his friends also specialize in taking quick profits from takeovers and other high-risk moves. In a typical maneuver earlier this year, Mr. Rothschild and Sir James Goldsmith, a U.S. papermaker, for \$100 million, rallied by the implied takeover threat, St. Regis promptly bought the shares back for about \$150 million.

Where Allied will be weak, analysts say, is in the mainstream of securities trading, an activity normally considered the heart of a U.S.-style investment bank. Neither L.F. Rothschild nor Charterhouse Japhet are major players in this area. Moreover, because Allied will own only half of the New York bank, coordination with the rest of the empire could be complicated.

Another concern is that Kitcat & Aitken, the London stockbrokerage in which CJR holds a stake, is so small as to be "almost irrelevant," as a senior CJR executive put it.

This executive asserts that Allied should buy a bigger British broker. But Mr. Weinberg said the company will have enough on its plate and probably should grow its brokerage skills in-house.

In Asia, Allied will have little presence beyond investment management. Richard Thorntoo, charged with formulating the new company's Asian strategy, said it will be "total failure" if Allied has not formed a link with a big Japanese securities house within five years.

The bigger question for Allied is whether Mr. Weinberg can persuade his independent-minded crew to pull in the same direction. Some analysts say the top ranks are heavy with "gunshiners" good at pulling off flashy deals but weak in administering a big company.

"If it didn't have a lot of gunshiners," Mr. Thornton countered, "it would be a pretty boring thing."

That raises another question: will Mr. Rothschild and some of his highfliers get bored as Mr. Wein-

berg imposes order and organization?

Mr. Rothschild's colleagues reject such talk. He will be busy "throwing ideas up in the air for the rest of us to catch," Mr. Hyde said.

"His objective was to get big soon, and he's done it," Mr. Weinberg said of his new partner. "He says he wants to hang up his gun now. That's the key point. You either accept that or you don't—and I do."

DeVoe-Holtham Int. N.V. \$ 6 1/4 Bid \$ 6 1/4 Ask

Prices in U.S. dollars Quote as of May 28, 1984.

Firm Commerce Securities B.V. Herengracht 483 1017 BT Amsterdam Telephone: 020-260901 Telex: 14507 Irtco nl

Gold Options (prices in \$/oz.)

Prices in U.S. dollars Quote as of May 28, 1984.

Valuers White Weld S.A.

121 Geneva 1, Switzerland Tel. 31 82 51 - Telex 28 385

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## Jaeger Quits Match; Navratilova, Connors Advance

100

United Press International

...wiser, returns a shot against Eric Fromm at the French Op

## ***In Defeat, Cubs Call Foul at Umpires' Foul Call***

**Cardinals 12, Braves 9**  
In Atlanta, Ozzie Smith drove in four runs, including three in a seven-run first, as St. Louis outscored the Braves, 12-9.

**Pirates 2, Astros 1**  
In Houston, left fielder Jose Cruz overran Tony Pena's fourth-inning single, allowing two runs to score and giving Pittsburgh a 2-1 victory over the Astros. Houston came back with a homer by Bill Doran in the bottom of the fourth.

**Blue Jays 6, Indians 1**  
**Blue Jays 6, Indians 5**  
In The American League, Toronto, pinch runner Alfredo Griffin scored from third base on Tony

and a sweep of their doubleheader. In the opener, Willie Aikens' hit run double and George Bell's run homer carried Toronto to a victory.

**Mariners 6, Tigers 1**  
In Seattle, two homers by Phelps helped the Mariners complete a sweep of their three-game series with a 6-1 triumph over Detroit. Detroit has lost three straight for the first time this season.

**Rangers 11, White Sox 3**  
In Arlington, Texas, Larry Irlish hit a three-run homer, drove in four runs and Dave Houtzler hit a two-run homer and the three RBIs to power Texas past Chicago, 11-3.

**Red Sox 6, Royals 0**  
In Boston, Bill Buckner hit first All-Star home run, a two-run ball and Dwight Evans and Tony Maso also homered as the Red Sox blanked Kansas City, 6-0.

**Brewers 5, Twins 4**  
In Minneapolis, Ted Simmons and Jim Gantner homered to lead Milwaukee past Minnesota, 5-4.

**Giants 8, Angels 0**

## Nicklaus, a Victor on His Course, Tees Off at TV

the top-ranked challenger throughout the fight to this western Venezuelan city, Mayor's hometown.

Mayor 21, though he managed to land several solid punches, could not overcome Pedrosa's superior strength and experience.

**A's 7, Yankees 1**

In Oakland, California, Rick Henderson had three hits, stole three bases and scored three runs as the A's routed New York, 7-1.

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- Callings to: Portofino, Genoa, Smeraldo, Taormina, Tiansi

## Major League Standings

NATIONAL LEAGUE					AMERICAN LEAGUE				
EAST					EAST				
	W	L	Pct.	GB		W	L	Pct.	GB
Brooklyn	26	16	.391		Philadelphia	25	18	.379	
Pittsburgh	22	19	.536		St. Louis	21	24	.467	
Cincinnati	22	19	.536	2½	Baltimore	25	21	.545	1½
Washington	21	20	.512	3½	Chicago	24	22	.522	1½
Philadelphia	21	21	.500	4	Boston	28	26	.519	
St. Louis	18	24	.429	7½	New York	19	25	.432	16½
Pittsburgh	17	24	.415	7½	Cleveland	26	27	.491	
WEST					WEST				
San Diego	24	21	.530		California	24	24	.500	
Los Angeles	26	23	.529		Minnesota	23	24	.489	½
San Francisco	26	23	.529		Seattle	23	24	.489	½
San Francisco	24	22	.522	½	San Francisco	24	24	.500	
Cincinnati	23	23	.500	1	Chicago	21	26	.447	2 ½
San Francisco	22	23	.489	1	Kansas City	24	28	.462	3
San Francisco	22	26	.452	5	St. Louis	21	27	.438	3
San Francisco	20	28	.417	7½					

### Sunday's Major League Line Scores

[illegible]

people we are really putting  
of tournament on for" Nickl

[illegible]

CHICAGO—Traded Bill Buckner, f

BUFFALO—Signed Scotty Bowman, director of hockey operations and general manager, to a multi-year contract.

DETROIT—Signed Clif Campbell, defenseman, to a two-year contract.

TORONTO—Named Don MacIntyre head coach.

WINNIPEG—Signed Paul Peeler, center, and Parry Peeler, left wing, to multi-year contracts.

**BASKETBALL**

National Basketball Association

LEVELAND—Fired Tom Ilesko, head coach.

**FOOTBALL**

National Football League

SEEN BAY—Cut Jeff Jones, tight end, Mike B. Ineckner, Bob Mirski, tight end, and Steve Paschke, wide receiver.

MINNAPOLIS COLTS—Signed J. Weathers, left tackle, James Bennett, full back, Darrel Hornbrick, Kenneth Oler, Mike Whitted, wide receivers, Morgan Lee, Charles Thomas, James Betts, Ben Williams, center, and Tommie Davis, Ramsey, Richard Duke, Duke Galt, and Terry Neely, defensive.

SEWARD LEAGUE, quarterback, Ross Williams, center, and James Cook, line.

MIKE WHITE, Harry Hammond, Kenneth Anthony, Manny Magallon, and Kevin Kurose, offensive linemen. Mike Yocum and Steve Ineckner, Walter Tate, center.

**NBA Finals**

Season's teams best-of-seven series, 4-0

Los Angeles Lakers vs. Boston 1977

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